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141-419

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1890.

No. ~~348~~. 44

EDWARD L. McCLAIN, APPELLANT,

vs.

ANDREW ORTMAYER AND CARL G. ORTMAYER.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF ILLINOIS.

FILED APRIL 2, 1888.

LAW ASSOCIATION
—OF—
PHILADELPHIA

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1 Pleas in the circuit court of the United States of America for the northern district of Illinois, held at the United States court-rooms, in the city of Chicago, in the district aforesaid, before the Hon. Henry W. Blodgett, district judge of the United States for the northern district of Illinois, on Monday, the ninth day of January, 1888, in the December term of said court, in the year of our Lord one thousand eight hundred and eighty-seven, and of our Independence the one hundred and twelfth year.

WM. H. BRADLEY, *Clerk.*

EDWARD L. McCLAIN
vs.
A. ORTMAYER AND SON *et al.* } In Chancery.

NORTHERN DISTRICT OF ILLINOIS, *ss:*

Be it remembered that on the fourteenth day of June, 1886, came the complainant, by his solicitors, and filed in the office of the clerk of the circuit court of the United States for the northern district of Illinois, at Chicago, in said district, his bond for costs and bill of complaint in said above-entitled cause; which said bond and bill are respectively in the words and figures following, to wit:

2 *Bond for Costs.*

UNITED STATES OF AMERICA,
Northern District of Illinois, } *ss:*

Circuit Court. December Term, A. D. 1885.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.* } In Chancery.

We enter ourselves security for costs in this cause and promise to pay all costs which may accrue to the opposite party in this action or to any of the officers of this court, and in default of payment by the complainant of any costs ordered or adjudged to be paid by complainant hereby agree and stipulate that execution may issue against our property for any costs taxed against complainant.

PEIRCE & FISHER.

Endorsed: Filed June 14, A. D. 1886. Wm. H. Bradley, clerk.

3 *Bill of Complaint.*

Circuit Court of the United States for the Northern District of Illinois.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON, a Corporation under the Laws of the State of Illinois, *et al.* } In Equity.

To the honorable the judges of the circuit court of the United States for the northern district of Illinois:

Edward L. McClain, a citizen of the State of Ohio and residing in Cincinnati, in said State, brings this his bill of complaint against A. Ortmayer & Son, a corporation organized under the laws of Illinois—Andrew Ortmayer, president, and Carl G. Ortmayer, vice-president thereof, citizens of the State of Illinois and residing at Chicago, in said State; and thereupon your orator complains and says that he was and is the original and first inventor of a new and useful "improvement in pads for horse collars," and which is fully described in the letters patent hereinafter mentioned, and which had not been known or used before his said invention, and which was not at the time of his application for a patent, as hereinafter mentioned, in public use or on sale with his consent or allowance.

4 And your orator, upon information and belief, further shows unto your honors that your said orator, being so as aforesaid the first inventor and discoverer of said improvements and being also a citizen of the United States, did, on the 20th day of June, 1882, upon due application therefor, obtain letters patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents of the United States, bearing date the day and year last aforesaid, whereby there was granted and secured to your said orator, his heirs, administrators, or assigns, or intended so to be, for the term of seventeen years from and after the date of said letters patent, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said invention and improvements, as set forth in said letters patent, which are here brought into court, and a copy of the specifications and drawings are hereunto attached, marked Exhibit A, and by virtue whereof he became and now is the sole owner of all the rights and privileges granted and secured or intended to be granted and secured in and by said letters patent.

Your orator further says that he was and is the original and first inventor of another new and useful "improvement in pads for horse collars," being an "improvement" upon the invention shown, described, and claimed in the last-mentioned letters patent, hereinafter mentioned, and which had not been known or used before his said invention, and which was not at the time of his application for a patent, as hereinafter mentioned, in public use or on sale with his consent or allowance.

And your orator, upon information and belief, further shows unto your honors that your said orator, being so as aforesaid the first inventor and discoverer of said improvements and being also a citizen of the United States, did, on the 7th day of November, 1882, upon due application therefor, obtain letters patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents of the United States, bearing date the day and year last aforesaid, whereby there was granted and secured to your said orator, his heirs, administrators or assigns, or intended so to be, for the term of seventeen years from and after the date of said letters patent, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said inventions and improvements as set forth in said letters patent, which are here brought into court, and a copy of the specifications and drawings are hereunto attached, marked Exhibit B, and by virtue whereof he became and was the sole owner of all the rights and privileges granted and secured or intended to be granted and secured in and by said letters patent.

Your orator further says that John Scherling was and is the original and first inventor of a certain new and useful improved "pad fastening for horse collars," the same being an improvement upon the inventions shown and described in both the foregoing mentioned letters patent, and which is fully described in the letters patent hereinafter mentioned, and which had not been known or used before his, the said Sherling's, said invention, and which was not at the time of his application for a patent, as hereinafter mentioned, in public use or on sale with his consent or allowance.

And your orator, upon information and belief, further shows unto your honors that said John Scherling, being so as aforesaid the first inventor and discoverer of said improvements and being also a citizen of the United States, did, on May 13th, 1884, upon due application therefor, obtain letters patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents of the United States, bearing date the day and year last aforesaid, whereby there was granted and secured to said Scherling and L. D. Randall & Co., as assignees, their heirs, administrators, or assigns, or intended so to be, for the term of seventeen years from and after the date of said letters patent, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said invention and improvements as set forth in said letters patent, which are here brought into court, and a true copy of the specifications and drawing thereof are hereto attached as Exhibit C, and by virtue whereof said Scherling and Randall & Co. became and were the sole owners of all the rights and privileges granted and secured or intented to be granted and secured in and by said letters patent.

6 And your orator further shows unto your honors that afterwards, to wit, on or about the 24th day of June, 1885, the

said John Scherling, by an assignment in writing of that date, sold, assigned, and transferred unto Edward P. Robbins all his right, title, and interest in and to said letters patent and invention, which said assignment was duly recorded in the Patent Office of the United States, as by said assignment, or a duly authenticated copy thereof, and the certificate of such recording thereto affixed, ready in court to be produced, will fully and at large appear.

And your orator further shows unto your honors that afterwards, to wit, on or about the 1st day of July, 1885, the said Edward P. Robbins, by an assignment in writing of that date, sold, assigned, and transferred unto your orator, Edward L. McClain, all his right, title, and interest in and to said letters patent and invention, which said assignment was duly recorded in the Patent Office of the United States, as by said assignment, or a duly authenticated copy thereof, and the certificate of such recording thereto affixed, ready in court to be produced, will fully and at large appear.

And your orator further shows unto your honors that afterwards, to wit, on or about the 24th day of June, 1885, the said L. D. Randall & Co., by an assignment in writing of that date, sold, assigned, and transferred unto your orator, Edward L. McClain, all their right, title, and interest in and to said letters patent and invention, which said assignment was duly recorded in the Patent Office of the United States, as by said assignment, or a duly authenticated copy thereof, and the certificate of such recording thereto affixed, ready in court to be produced, will fully and at large appear.

And your orator further shows unto your honors that by virtue of the premises he became and now is the sole and exclusive owner of said three letters patent and the inventions and improvements described therein, and of all the rights and privileges granted and secured or intended to be granted and secured thereby; and that since he became the owner thereof as aforesaid he has invested and expended large sums of money, and has been to great trouble in and about said inventions, and for the purpose of carrying on the business of making and selling pads and pad fastenings for
7 horse collars containing all of said inventions and making the same profitable to himself and useful to the public; and that said inventions have been and are of great benefit and advantage; and that pads and pad fastenings for horse collars were made according to said invention and sold by said Edward L. McClain to great advantage to the public; and that the public have generally acknowledged and acquiesced in the aforesaid rights of your orator, and your orator believes that he will realize and receive large gains and profits therefrom if infringements by said defendants and their confederates shall be prevented.

Yet said defendants, well knowing the premises and the rights secured to your orator aforesaid, but contriving to injure your orator and to deprive him of the benefits and advantages which might and otherwise would accrue unto him from said inventions, after the issuing of the letters patent as aforesaid and before the commencement of this suit, did, as your orator is informed and believes, without the license or allowance and against the will of your orator

and in violation of his said rights and in infringements of each and all the aforesaid letters patent, unlawfully and wrongfully and in defiance of the rights of your orator, make, construct, use, and vend to others to be used the said inventions, and did make, construct, use, and vend to others to be used pads and pad fastenings for horse collars made according to and employing and containing said invention, and that they are still continuing so to do, and that they are threatening to make the aforesaid pads and pad fastenings for horse collars containing said inventions in large quantities and to supply the market therewith and to sell the same.

And your orator further shows unto your honors that each of the pads and pad fastenings for horse collars that has been made or sold by said defendants in infringement of your orator's rights has contained each and all of the inventions described and claimed in all of the foregoing alleged patents. Your orator further shows unto your honors, upon information and belief, that the defendant corporation, "A. Ortmayer & Son," have been recently incorporated, to wit, on the 4th day of January, 1886; that prior to said date the same parties who are now the stockholders, directors, and officers of said corporation carried on the same business at the same place and with the same capital and in the same name, to
8 wit, A. Ortmayer & Son; that during a considerable period prior to the formation of said corporation and while said business was carried on as an ordinary mercantile partnership the same parties who now own the stock of the corporation as such firm infringed said patents in the way the corporation is now doing and by exactly the same character of manufacture, and that said infringement has been continuous—

All in defiance of the rights acquired by and secured to your orator as aforesaid and to his great and irreparable loss and injury, and by which he has been and still is being deprived of great gains and profits which he might and otherwise would have obtained, but which have been received and enjoyed and are being received and enjoyed by the said defendants by and through their aforesaid unlawful acts and doings.

And your orator further shows unto your honors, on information and belief, that said defendants have sold large quantities of said pads for horse collars and have a large quantity on hand which they are offering for sale, and have made and realized large profits and advantages therefrom, but to what extent and how much exactly, your orator does not know and prays a discovery thereof; and your orator says that the use of said invention by said defendants and their preparation for and avowed determination to continue the same and their other aforesaid unlawful acts in disregard and defiance of the rights of your orator have the effect to and do encourage and induce others to venture to infringe said patents in disregard of your orator's rights.

And your orator further shows unto your honors that he has caused notice to be given to said defendants of said infringements and of the rights of your orator in the premises and requested them to desist and refrain therefrom, but they have disregarded said

notice and refused to desist from said infringements and still continue to make and sell said pads and pad fastenings for horse collars containing said inventions.

And forasmuch as your orator can have no adequate relief except in this court, to the end, therefore, that said defendants may, if they can, show why your orator should not have the relief hereby prayed, and may, according to their best and utmost knowledge, remembrance, information, and belief, full, true, direct, and perfect answers make to the premises, but not under oath, an oath being hereby expressly waived, and to all the several matters hereinbefore stated and charged, as fully and particularly as if severally and separately interrogated as to each and every of the said matters, and may be compelled to account for and pay to your orator the profits by them acquired and the damages suffered by your orator from the aforesaid unlawful acts.

9

And your orator prays that said defendants, A. Ortmayer & Son, Andrew Ortmayer and Carl G. Ortmayer, their servants, agents, attorneys, and workmen, and each and every of them, may be restrained and enjoined provisionally and perpetually by the order and injunction of this honorable court from directly or indirectly making, constructing, using, vending, delivering, working, or putting into practice, operation, or use or in anywise counterfeiting or imitating the said inventions or any part thereof or any pads for horse collars or pad fastenings theretofore made in accordance therewith or like or similar to those which they have heretofore made, and that the said defendants may be decreed to pay the costs of this suit, and that your orator may have such further relief or such other relief as to this honorable court shall seem meet and as shall be agreeable to equity.

May it please your honors to grant unto your orator the writ of injunction, as well provisional as perpetual, issuing out of and under the seal of this honorable court, commanding, enjoining, and restraining the said defendants, A. Ortmayer & Son, Andrew Ortmayer and Carl G. Ortmayer, and their servants, agents, attorneys, and workmen and each and every of them as is hereinbefore in that behalf prayed.

May it please your honors to grant unto your orator the writ of subpœna, issuing out of and under the seal of this honorable court, directed to the said defendants, A. Ortmayer & Son, Andrew Ortmayer and Carl G. Ortmayer, commanding them, by a certain day and under a certain penalty, to be and appear in this honorable court, then and there to answer the premises, and to stand to and abide such order and decree as may be made against them.

And your orator will ever pray, &c.

EDWARD L. McCLAIN.

Compl't's sol'rs, PIERCE & FISHER.
Of counsel, JAMES MOORE.

10 UNITED STATES OF AMERICA, } ss:
Southern District of Ohio, }

On the 26th day of May, 1886, before me personally appeared Edward L. McClain, the above-named complainant, who, being by me first duly sworn, deposes and says that he has read the foregoing bill of complaint subscribed by him and knows the contents thereof, and that the same is true of his own knowledge except as to the matters therein stated on information and belief, and as to those matters he believes it to be true.

Witness my hand and official seal.

SAM'L S. CARPENTER,
Notary Public in and for Hamilton County, Ohio.

Endorsed: Filed Nov. 12, 1887. Wm. H. Bradley, clerk.

11 On the same day, to wit, on the fourteenth day of June 1886, there issued out of said clerk's office a writ of subpœna in said entitled cause; which said writ, together with the return of the marshal endorsed thereon, is in the words and figures following, to wit:

Subpœna.

UNITED STATES OF AMERICA, } ss:
Northern District of Illinois, }

The United States of America to A. Ortmayer & Son, a corporation &c., Andrew Ortmayer, president, and Carl G. Ortmayer, vice-president, Greeting:

We command you and every of you that you appear before our judges of our circuit court of the United States of America for the northern district of Illinois at Chicago, in said district, on the first Monday in the month of July next, to answer the bill of complaint of Edward L. McClain, this day filed in the clerk's office of said court, in said city of Chicago, then and there to receive and abide by such judgment and decree as shall then or thereafter be made, upon pain of judgment being pronounced against you by default.

To the marshal of the northern district of Illinois to execute.

[SEAL.] Witness the Hon. Morrison R. Waite, Chief Justice
12 of the Supreme Court of the United States of America, at Chicago aforesaid, this 14th day of June, in the year of our Lord one thousand eight hundred and eighty-six, and of our Independence the 110th year.

WM. H. BRADLEY, *Clerk.*

Memorandum.

The above-named defendants are notified that unless they and each of them shall enter their appearance in the clerk's office of said court, at Chicago aforesaid, on or before the day to which the above writ is returnable the complainant's bill will be taken against them as confessed and a decree entered accordingly.

WM. H. BRADLEY, *Clerk.*

I have served the within writ within my district in the following manner, to wit: Upon A. Ortmayer & Son, a corporation, &c., therein named, on the 14th day of June, A. D. 1886, by delivering a true copy thereof to Carl G. Ortmayer, vice-president of the aforesaid corporation, on the 14th day of June, A. D. 1886.

F. H. MARSH,
U. S. Marshal,
By GEO. N. JONES, *Deputy.*

Endorsed: Filed July 6, A. D. 1886. Wm. H. Bradley, clerk.

13 Afterwards, to wit, on the sixth day of August, 1886, came the defendants, by their solicitors, and filed in said clerk's office their appearance in said entitled cause; which said appearance is in the words and figures following, to wit:

Appearance.

Circuit Court of the United States, Northern District of Illinois.

EDWARD L. McCLAIN
vs.
A. ORTMAYER *et al.* } In Equity.

We hereby enter the appearance of the defendants in the above-entitled cause.

BANNING & BANNING,
Solicitors for Defendants.

Endorsed: Filed July 6, 1886. Wm. H. Bradley, clerk.

Afterwards, to wit, on the fourth day of August, 1886, came the defendants, by their solicitors, and filed in said clerk's office their answer to the bill in said entitled cause; which said answer is in the words and figures following, to wit:

14 Circuit Court of the United States, Northern District of Illinois.

EDWARD L. McLAIN
vs.
A. ORTMAYER & SON *et al.* } In Equity.

The answer of A. Ortmayer & Son, Andrew Ortmayer and Carl G. Ortmayer, defendants, to the bill of complaint of Edward L. McLain, complainant.

These defendants, now and at all times hereafter saving and reserving unto themselves all benefit and advantage of exception which can or may be had or taken to the many errors, uncertainties, and insufficiencies in the said bill of complaint contained, for answer thereunto, or unto so much and such parts thereof as these defendants are advised it is material or necessary for them to make answer unto, say:

These defendants admit the issuance of the several letters patent of the United States mentioned and set forth in the complainant's said bill, to wit, Nos. 259,700, 267,011, and 298,626, but as to whether the same were duly and properly issued and as to whether the complainant is the sole owner thereof and of all the rights and privileges secured or alleged to be secured thereby respectively these defendants have no knowledge save as informed by said bill, and they therefore neither admit nor deny the same, but leave the complainant to make such proof thereof as he may be advised is material. .

These defendants, on their own understanding of the scope and meaning of said several letters patent and on the advice of
15 counsel in relation thereto, deny that they have ever in any way or manner infringed upon the same or upon any of them or upon any claim thereof, and say that they have always and in good faith endeavored to conduct their business in such a way as to avoid violating or interfering with the rights of others; but they admit that, conducting their business in this way, they have as a corporation and individually, as hereinafter stated, manufactured and sold sweat pads for horse collars under letters patent of the United States No. 331,813, issued to the defendant Andrew Ortmayer December 8, 1885—that is to say, sweat pads adapted to be fastended or secured to the collar by a simple hook made of wire, arranged to clasp the front roll of the collar, but not in any way having or employing the pretended inventions and improvements described and claimed in said several letters patent or either of them; that since the incorporation of the said defendant, "A. Ortmayer & Son," as set forth in said bill, the business of manufacturing and selling said sweat pads has been carried on solely by the said defendant as such incorporation and not by the other of said defendants or either of them personally, their only connection with said business since that time being as stockholders and officers of said incorporation respectively; so that, in any view, the said "A. Ortmayer & Son" is alone liable as an incorporation for whatever has been done, if anything wrong, in the conduct of said business since the time it became an incorporated company as aforesaid; and these defendants therefore emphatically deny, on the understanding and advice aforesaid, that they have ever in any way or manner, either separately or together, or personally or as a corporation, infringed upon the complainant's said letters patent or either of them or any claim thereof.

16 These defendants further deny, on information and belief, that the complainant was the original and first inventor and discoverer of the pretended inventions and improvements described and claimed in said letters patent Nos. 259,700 and 267,011 or either of them, and that the said John Scherling was the original and first inventor of the pretended inventions and improvements described and claimed in said letters patent No. 298,626, but these defendants say, on information and belief, that prior to the alleged invention and discovery thereof by the complainant and the said Scherling respectively the said several pretended inventions and improve-

ments or substantial and material parts thereof had been shown or described in various letters patent as follows:

United States letters patent—

No. 108,071, dated October 4th, 1870, to James F. Walsh; reissued November 3, 1877, No. 7951.
No. 112,713, dated March 14, 1871, to Lemuel L. Hull.
No. 143,987, dated October 28, 1873, to Lindsley & Mackintosh.
No. 157,367, dated December 1, 1874, to John M. Bright.
No. 208,516, dated October 1, 1878, to George A. De Zeng.
No. 236,857, dated January 18, 1881, to John T. Stoll.
No. 256,977, dated April 25, 1882, to George P. Cole.

English letters patent—

No. 1404, of 1783.
No. 612, of 1853.

Canadian letters patent cited as against the Scherling patent—

No. 17269, dated July 13, 1883, to Edward L. McLain, and in various other United States and foreign letters patent, the cor-
17 rect references to which these defendants are not now able to give, but which they pray may be hereafter inserted when discovered.

These defendants further deny, on information and belief, that the complainant was the original and first inventor and discoverer of the pretended inventions and improvements described and claimed in said letters patents Nos. 259,700 and 267,011 or either of them, and, on information and belief, say that said pretended inventions and improvements and every substantial and material part thereof were known to and used by others in this country long prior to the alleged invention and discovery thereof by the complainant, and particularly that they were so known to and used by William H. Osmer, of North Market street and Grand avenue, St. Louis, Missouri, at said St. Louis, and to others whose names and places of residence these defendants are now unable to give, but which they pray may be inserted herein when discovered.

These defendants further deny, on information and belief, that the said John Scherling was the original and first inventor and discoverer of the pretended inventions and improvements described and claimed in said letters patent No. 298,626, and, on information and belief, say that said pretented inventions and improvements and every substantial and material part thereof were known to and used by others in this country long prior to the alleged invention and discovery thereof by the said Scherling, and particularly that they were so known to and used by Gibson, Parish & Company, of 78 and 80 Randolph street, Chicago, Illinois, at said Chicago, and to others whose names and places of residence these defendants are now unable to give, but which they pray may be inserted herein when discovered.

18 These defendants further say that at the time of the filing of his application for said letters patent No. 259,700 the com-

plainant, through his solicitor, presented and filed in the Patent Office a long list of patents stated to have been previously examined and considered in connection with the preparation of his said application; and particularly as showing the state of the art, these defendants now refer to said list and to each and all the patents therein mentioned, as shown and contained in the record of said application, and pray that the same force and effect may be given thereto as if such list were now repeated herein.

These defendants further say that, as shown by their own terms and by the records of the applications therefor respectively, the said letters patents Nos. 259,700, 267,011, and 298,626, if valid at all, are limited to the specific devices and forms therein shown respectively, and that, as showing the proper construction to be put thereon, these defendants will hereafter produce and offer duly authenticated copies of said records, which they now pray may be considered and treated the same as if attached hereto and made a part hereof.

These defendants further say that on or about the second day of July, 1884, the said complainant presented and filed an application for a patent, on which his letters patent No. 313,606, not now in suit, were subsequently issued; that said application, being at first rejected on a reference to the said Scherling patent No. 289,626, the said complainant, through his solicitor, presented and filed in the Patent Office a long argument to the effect, among other things, that the inventions and improvements described and claimed in
19 the said Scherling patent were fully and in every essential particular described or shown in the complainant's previously issued Canadian patent No. 17269, dated July 13, 1883, and that, having thus urged his claim to priority as against the said Scherling, and thereby induced or influenced the Patent Office to give his said application favorable consideration, the said — ought now in equity and good conscience to be estopped from making or asserting any claim whatever under the said Scherling patent as against these defendants or the public generally.

These defendants further say, on information and belief, that the pretended inventions and improvements described and claimed in said letters patent Nos. 259,700, 267,011, and 298,626 respectively or substantial and material parts thereof were in common and general use for other purposes long prior to the alleged invention and discovery thereof by the said complainant and the said Scherling respectively, and that only mechanical skill and not invention was required to adapt and apply them to the purpose and object set forth in said letters patent respectively. Wherefore these defendants say and charge that said letters patent and each of them are void for want of patentable novelty in their subject-matter respectively.

Without this, that any other matter or thing whatsoever in the said bill of complaint contained material or necessary for these defendants to make answer unto and not herein and hereby sufficiently answered, confessed, traversed, avoided, or denied, is true to the knowledge or belief of these defendants; all which matters
20 and things these defendants are ready and willing to aver, maintain, and prove as this honorable court shall direct, and

humbly pray to be hence dismissed with their reasonable costs and charges in this behalf most wrongfully sustained.

A. ORTMAYER & SON,
By ANDREW ORTMAYER, *President.*
ANDREW ORTMAYER,
Care G. Ortmayer.

RANNING & BANNING,
Solicitors and of Counsel for Defendants.

STATE OF ILLINOIS, } ss:
Cook County, }

Andrew Ortmayer, president of A. Ortmayer & Son and also one of the defendants in the above-entitled cause, being duly sworn, upon oath says that he has heard read the foregoing answer subscribed by him and knows the contents thereof, and that the same is true of his own knowledge except as to the matters therein stated on information and belief, and as to these he believes it to be true.

ANDREW ORTMAYER.

Subscribed and sworn to before me this 4th day of August, A. D. 1886.

JULIUS W. DYRENFORTH,
[SEAL.] *Notary Public.*

Endorsed: Filed Aug. 4th, 1886. Wm. H. Bradley, clerk.

21 Afterwards, to wit, on the sixth day of September, 1886, came the complainant, by his solicitors, and filed in said clerk's office his replication to the answer of the defendants in said entitled cause; which said replication is in the words and figures following, to wit:

Replication.

Circuit Court of the United States for the Northern District of Illinois.

EDWARD L. MCCLAIN
vs. } In Equity.
A. ORTMAYER & SON *et al.*

The replication of the above-named complainant to the answer of the above-named defendants.

This repliant, saving and reserving to himself now and at all times hereafter all and all manner of benefit and advantage of exception which may be had or taken to the manifold insufficiencies of said answer, for replication thereunto says that he will aver, maintain, and prove his said bill of complaint to be true, certain, and sufficient in law to be answered unto, and that the said answer of the said defendant is uncertain, untrue, and insufficient to be

replied unto by this repliant; without this, that any other
22 matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto and not herein and hereby well and sufficiently replied unto, confessed and avoided, traversed or denied, is true; all which matters and things this repliant is and will be ready to aver, maintain, and prove as this honorable court shall direct, and humbly prays as in and by his said bill he has already prayed.

JAMES MOORE,
PEIRCE & FISHER,
Solicitors for Complainant.

Endorsed: Filed Sept. 6, 1886. Wm. H. Bradley, clerk.

23 Afterwards, to wit, on the twenty-eighth day of October, in the adjourned October term of said court, 1886, in the record of the proceedings thereof in said entitled cause, before Hon. Walter Q. Gresham, circuit judge, is the following entry, to wit:

Order.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.* } In Chancery.

On motion of the defendants, the complainant's counsel consenting thereto, it is ordered that the defendants have leave to amend their answer in this cause *instanter*, and that the replication to the original answer stand as a replication to the amended answer filed pursuant to this order.

On the same day, to wit, on the twenty-eighth day of October, 1886, came the defendants, by their solicitors, and filed in said clerk's office their amended answer in said entitled cause; which said amended answer is in the words and figures following, to wit:

24 Circuit Court of the United States, Northern District of Illinois.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.* } In Equity.

The amended answer of A. Ortmayer & Son, Andrew Ortmayer and Carl G. Ortmayer, defendants, to the bill of complaint of Edward L. McClain, complainant.

These defendants, now and at all times hereafter saving and reserving unto themselves all benefit and advantage of exception which can or may be had or taken to the many errors, uncertainties, and insufficiencies in the said bill of complainant contained, for answer thereunto, or unto so much and said parts thereof as these

defendants are advised it is material or necessary for them to make answer unto, say:

1. These defendants admit the issuance of the several letters patent of the United States mentioned and set forth in the complainant's said bill, to wit, Nos. 259,700, 267,011, and 298,626, but as to whether the same were duly and properly issued, and as to whether the complainant is the sole owner thereof and of all the rights and privileges secured or alleged to be secured thereby respectively, these defendants have no knowledge save as informed by said bill, and they therefore neither admit nor deny the same, but leave the complainant to make such proof thereof as he may be advised is material.

2. These defendants, on their own understanding of the scope and meaning of said several letters patent and on the advice of counsel in relation thereto, deny that they have ever in any way or manner infringed upon the same or upon any of them or upon any claim thereof, and say that they have always and in good faith endeavored to conduct their business in such a way as to avoid violating or interfering with the rights of others; but they admit that, conducting their business in this way, they have, as a corporation and individually, as hereinafter stated, manufactured and sold sweat pads for horse collars under letters patent of the United States No. 331,813, issued to the defendant Andrew Ortmayer December 8, 1885—that is to say, sweat pads adapted to be fastened or secured to the collar by a simple hook, made of wire, arranged to clasp the front roll of the collar, but not in any way having or employing the pretended inventions and improvements described and claimed in said several letters patent or either of them; that since the incorporation of the said defendant, "A. Ortmayer & Son," as set forth in said bill, the business of manufacturing and selling said sweat pads has been carried on solely by the said defendant as such incorporation and not by the other of said defendants or either of them personally, their only connection with said business since that time being as stockholders and officers of said incorporation respectively, so that in any view the said "A. Ortmayer & Son" is alone liable as an incorporation for whatever has been done, if anything, wrong in the conduct of said business since the time it became an incorporated company as aforesaid; and these defendants therefore emphatically deny, on the understanding and advice aforesaid, that they have ever in any way or manner, either separately or together, or personally or as a corporation, infringed upon the complainant's said letters patent or either of them or any claim thereof.

3. These defendants further deny, on information and belief, that the complainant was the original and first inventor and discoverer of the pretended inventions and improvements described and claimed in said letters patent Nos. 259,700 and 267,011 or either of of them, and that the said John Scherling was the original and first inventor of the pretended inventions and improvements described and claimed in said letters patent No. 298,626; but these defendants say, on information and belief, that prior to the alleged inven-

tion and discovery thereof by the complainant and the said Scherling respectively the said several pretended inventions and improvements or substantial and material parts thereof had been shown or described in various letters patent, as follows:

United States letters patent—

No. 41528, dated February 9, 1864, to Montleart & Tent.
No. 48586, dated July 4, 1865, to William R. Phelps.
No. 87543, dated March 9, 1869, to H. E. Churchill.
No. 88060, dated March 23, 1869, to James L. Moore.
No. 91389, dated June 15, 1869, to John H. Weeden, assignor, etc.
No. 108,071, dated October 4, 1870, to James F. Walsh; reissued November 3, 1877, No. 7951.
27 No. 112,713, dated March 14, 1871, to Lemuel L. Hull.
No. 129,170, dated July 16, 1872, to Thomas C. Rice.
No. 131,816, dated October 1, 1872, to Felice Fabrici.
No. 143,364, dated September 30, 1873, to Marson & Phillips.
No. 143,987, dated October 28, 1873, to Lindsley & McIntosh.
No. 157,367, dated December 1, 1874, to John M. Bright.
No. 160,432, dated March 2, 1874, to Holabird & Parks.
No. 162,095, dated April 13, 1875, to Andrew Ortmayer; reissued Feb. 29, 1876, No. 6969; reissued March 7, 1882, No. 10055.
No. 164,200, dated June 8, 1875, to Robert C. Nichols.
No. 168,957, dated October 19, 1875, to Samuel Ayres.
No. 187,621, dated February 20, 1877, to Edwin W. Grove.
No. 198,191, dated December 18, 1877, to Lucius Deming, assignor, etc.
No. 198,890, dated January 1, 1878, to John P. Lindsay.
No. 207,694, dated September 3, 1878, to Patrick F. Tunny.
No. 208,516, dated October 1, 1878, to George A. De Zeng.
No. 220,550, dated October 14, 1879, to Edward Schaub.
No. 231,051, dated August 10, 1880, to Joel Jenkins.
No. 236,857, dated January 18, 1881, to John T. Stoll.
No. 254,983, dated March 14, 1882, to Hubert L. Judd.
28 No. 256,977, dated April 25, 1882, to George P. Cole.
No. 264,947, dated September 26, 1882, to Henry R. Heyl.
No. 289,392, dated December 4, 1883, to Alphonse T. Cwerdinsci.

Canadian letters patents—

No. 17269, dated July 13, 1883, to Edward L. McClain.

English letters patent—

No. 1404, of 1783.
No. 612, of 1853.

And in various other United States and foreign letters patent, the correct references to which these defendants are not now able to give, but which they pray may be hereafter inserted when discovered.

4. These defendants further deny, on information and belief, that the complainant was the original and first inventor and discoverer of the pretended inventions and improvements described and claimed in said letters patent Nos. 259,700 and 267,011 or either of

them, and, on information and belief, say that said pretended inventions and improvements and every substantial and material part thereof were known to and used by others in this country long prior to the alleged invention and discovery thereof by the complainant, and particularly that they were so known to and used by William H. Osmer, of North Market street and Grand avenue, St. Louis, Missouri, at St. Louis, and to others whose names and places of residence these defendants are now unable to give, but which they pray may be inserted herein when discovered.

5. These defendants further deny, on information and belief, that the said John Scherling was the original and first inventor and discoverer of the patended inventions and improvements described and claimed in said letters patent No. 298,626, and, on information and belief, say that said pretended inventions and improvements and every substantial and material part thereof were known to and used by others in this country long prior to the alleged invention and discovery thereof by the said Scherling, and particularly that they were so known to and used by the following persons, to wit: A. Ortmayer & Son, 16–22 State street, Chicago, Illinois, at said Chicago; Gibson, Parish & Company, 78–80 Randolph street, Chicago, Illinois, at said Chicago; Marshal Field & Co., Madison and Market streets, Chicago, Illinois, at said Chicago; Joel Jenkins and The Consolidated Safety Pin Company, 33 Bleeker street, New York city, at said New York city; Julius Berbecker & Co., 63 Duane street, New York city, at said New York city; W. T. Mesereau & Co., 323 Broadway, New York city, at said New York city; H. L. Judd & Co., New York city, at said New York city; Turner & Seymour Manufacturing Company of New York city, at said New York city; Benedict & Burnham Manufacturing Company of New York city, at said New York city; Furgeson Bros. of New York city, at said New York city; Robert S. Gould of New York city, at said New York city, and Cushman Bros. of Boston, Massachusetts, at said Boston, and to others whose names and places of residence these defendants are now unable to give, but which they pray may be inserted herein when discovered.

29

6. These defendants further say that at the time of the filing of his application for said letters patent No. 259,700 the complainant, through his solicitor, presented and filed in the Patent Office a long list of patents stated to have been previously examined and considered in connection with the preparation of his said application, and particularly as showing the state of the art; these defendants now refer to said list and to each and all the patents therein mentioned, as shown and contained in the record of said application, and pray that the same force and effect may be given thereto as if such list were now repeated herein.

30

7. These defendants further say that, as shown by their own terms and by the records of the applications therefor respectively, the said letters patent Nos. 259,700, 267,011, and 298,626, if valid at all, are limited to the specific devices and forms therein shown respectively, and that, as showing the proper construction to be put thereon as well as for other purposes, these defendants will hereafter produce

and offer duly authenticated copies of said records, which they now pray may be considered and treated the same as if attached hereto and made a part hereof.

8. These defendants further say that on or about the second day of July, 1884, the said complainant presented and filed an application for a patent, on which his letters patent No. 313,606, not now in suit, were subsequently issued; that said application being at first rejected on a reference to the said Scherling patent, No. 298,626, the said complainant, through his solicitor, presented and filed in the Patent Office a long argument to the effect, among other things, that the inventions and improvements described and claimed in the said Scherling patent were fully and in every essential particular described or shown in the complainant's previously issued Canadian patent No. 17269, dated July 13, 1883, and that, having thus urged his claim to priority as against the said Scherling and thereby induced or influenced the Patent Office to give his said application favorable consideration, the said complainant ought now in equity and good conscience to be estopped from taking or asserting
31 any claim whatever under the said Scherling patent as against these defendants or the public generally.

9. These defendants further say, on information and belief, that in his application for said letters patent No. 298,626 the said John Scherling did not make any such full, clear, concise, and exact description of the said pretended invention now claimed to be described and claimed therein as to enable any person skilled in the art to make, construct, and use the same, but that, as issued, said patent is vague, indefinite, uncertain, and misleading in both its specification and claims, and therefore that said letters patent are void and of no force or effect whatever.

10. These defendants further say that the form of hook and pin shown in figure 2 of the drawings of said letters patent No. 298,626, which is the only form these defendants are claimed to be using or to have used, is impracticable and useless as a fastening for horse-collar pads when applied in the manner presumably intended to be pointed out in said letters patent, and therefore these defendants say that if the first claim of said letters patent is to be understood and construed as covering said form, said claim is wholly void and of no force or effect whatever for want of utility in its subject-matter.

11. These defendants further say, on information and belief, that the pretended inventions and improvements described and claimed in said letters patent Nos. 259,700, 267,011, and 298,626 respectively or substantial or material parts thereof were in common and general use for other purposes long prior to the alleged invention and discovery thereof by the said complainant and said Scherling respectively, and that only mechanical skill and not invention was required to adapt and apply them to the purpose and object set forth in said letters patent respectively. Wherefore these de-
32 fendants say and charge that said letters patent and each of them are void for want of patentable novelty in their subject-matter respectively.

Without this, that any other matter or thing whatsoever in the said bill of complainant contained material or necessary for these defendants to make answer unto and not herein and hereby sufficiently answered, confessed, traversed, avoided, or denied, is true to the knowledge or belief of these defendants; all which matters and things these defendants are ready and willing to aver, maintain, and prove as this honorable court shall direct, and humbly pray to be hence dismissed with their reasonable costs and charges in this behalf most wrongfully sustained.

A. ORTMAYER & SON,
By A. ORTMAYER, *President.*
ANDREW ORTMAYER.
CARL G. ORTMAYER.

BANNING & BANNING,
Solicitors and of Counsel for Defendants.

STATE OF ILLINOIS, } ss:
Cook County, }

Andrew Ortmayer, president of A. Ortmayer & Son and also one of the defendants in the above-entitled cause, being duly sworn, upon oath says that he has read the foregoing answer subscribed by him and knows the contents thereof, and that the same is true of his own knowledge except as to the matters therein stated on information and belief, and as to these he believes it to be true.

ANDREW ORTMAYER.

Subscribed and sworn to before me this 27th day of October, A. D. 1886.

FRANK L. DOUGLAS,
[SEAL.] *Notary Public.*

Endorsed: Filed Oct. 28, 1886. Wm. H. Bradley, clerk.

33 Afterwards, to wit, on the seventh day of March, in the adjourned March term of said court, 1887, in the record of the proceedings thereof in said entitled cause, before Hon. Walter Q. Gresham, circuit judge, is the following entry, to wit:

Order.

EDWARD L. McCLAIN
vs. } In Chancery.
A. ORTMAYER & SON *et al.*

On motion, the complainant is ruled to close his rebutting testimony within three months.

Afterwards, to wit, on the thirteenth day of June, in the adjourned May term of said court, 1887, in the record of the proceedings thereof in said entitled cause, before Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

Order.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.* } In Chancery.

On motion of the defendants, it is ordered that if complainant take any more proofs on the question of extensive use, &c., of
34 his patented invention he take the same at his own expense, so far as regards taxable costs, unless the court shall order otherwise on the final hearing of the case.

Afterwards, to wit, on the twentieth day of December, in the December term of said court, 1887, in the record of the proceedings thereof in said entitled cause, before Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

Order.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.* } In Chancery.

Now come the parties, by their solicitors, and this cause, being set down for hearing this day, now comes on to be heard upon pleadings and proofs, and, after hearing the arguments of counsel, the court takes the same under advisement.

35 Afterwards, to wit, on the ninth day of January, 1888, the opinion of Judge Blodgett was filed in said clerk's office in said entitled cause; which said opinion is in the words and figures following, to wit:

Opinion.

Circuit Court of the United States, N. D. of Illinois.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.*

BLODGETT, *J.:*

The bill in this case seeks to restrain the alleged infringement of letters patent No. 259,700, granted to complainant January 20, 1882, for a "pad for horse collars;" patent No. 267,011, granted to complainant Nov. 7, 1882, for a "pad for horse collars;" and patent No. 298,626, granted May 13, 1884, to John Scherling and L. D. Randall & Co. for a "pad fastening for horse collars;" which last letters patent complainant now holds by assignment.

All these patents relate to devices for fastening the pad to a horse collar, the pad being a sort of cushion made of soft cloth stuffed with hair, to be interposed between the collar and neck of the horse, used

mainly for heavy draft horses. The pads themselves are ad-
36 mitted to be old, and these patents have only to do with contrivances for fastening them to the collar.

The first patent covers a fastening consisting of two elastic steel hooks fixed firmly by rivets to the pads, with the hooks so adjusted that one clasps the front roll or wale of the collar, while the other hook clasps the after roll of the collar, the hooks being of elastic material, set so as to firmly grip or clasp the rolls of the collar and thus keep the pad in place, and by reason of the elasticity of the springs the pad, while held properly in place, is readily detachable from the collar. This patent contains two claims, but infringement is charged only as to the first, which is in these words:

"As attachments to a sweat or other horse-collar pad, the elastic springs S S, substantially as described and for the purpose set forth."

The second patent shows a device similar in all respects to the first, except that only one elastic hook is used, which is so arranged as to clasp the fore roll of the collar, the hook for grasping the back roll of the collar being dispensed with. This patent contains two claims, and infringement is charged as to both; these claims are as follows:

1. As an attachment to a horse-collar pad or other harness pad and as adjustably attaching a pad to a horse collar or other part of a harness, the elastic single roll or single curved spring S, constructed, arranged, attached, and operating substantially in the manner shown or described and for or with the purpose set forth.

37 2. The combination, with a horse-collar pad, of the elastic single roll or curved spring S, substantially in the manner shown or described and for the purposes set forth.

The third patent covers a single safety-pin and hook so constructed that the shaft of the pin is thrust into the soft material of the pad and its point secured in the safety lock, while a bow or hook springing from the guard of the pin is clasped over the fore roll of the collar substantially in the same way shown in the McClain second or single-hook patent, the only difference being that in McClain's second patent the hook is riveted to the pad, while in the Scherling patent the hook is pinned to the surface of the pad. Infringement is charged of the first claim of this patent, which is:

"The described safety-pin and hook formed of wire, consisting of the bows B B and the part A, connecting the bows, with suitable integral devices for attachment to the collars formed upon the ends of the bows, substantially as described.

The defenses are:

1. That defendants do not infringe either patent.

2. That the two last-mentioned patents are void for want of novelty.

The defendants use a strong, stiff wire hook fastened to a stiff piece of leather, which is riveted to the pad and adapted to clasp the front roll only of the collar, depending for its ready connection with and grip of the collar rather upon the yielding nature of the collar than the elasticity of the hook. Although there is undoubtedly

some elasticity in the wire from which defendants' hook is
38 made, yet it is manifest that the hook is intended to operate by forcing the collar roll into the throat of the hook instead of opening a light flexible spring and snapping it around the collar roll, as would be done in applying the spring shown in either of the McClain patents.

As to the first of these patents I think there can be no doubt that the first claim, and, for that matter, both claims, require the use of the double spring S S—one arranged to grasp the front and the other the back roll of the collar. The claim is for the attachment of these springs S S to a horse-collar pad. The patentee says in his specifications, "One end of a spring is so curved as to partly encircle the fore wale or small roll of the collar, and to hug it so closely as to keep out of the way of the hame, and the other end is so curved as to similarly partly encircle and hug the after wale or body of the collar and yet not interfere with the hame." Here he describes two hooks or elastic springs for the purpose of attaching the pad to a horse collar, and claims this device as his invention. A study of the specifications of this patent also shows, I think, very clearly that the patentee intended to use hooks which should depend mainly for their operation on their elasticity. Now, as the defendants use only one hook and that not dependent on its elasticity for its effective operation, as I think a stiff hook of cast or malleable iron would work as well as defendants' wire hook, it is clear to me that they do not infringe the first claim of this patent.

It was urged on behalf of defendants upon the argument that this
39 first claim is baldly for the elastic springs S S, and that the words "as attachments to a sweat or other horse-collar pad" are surplusage, on the ground that an inventor is entitled to all the uses to which his invention is applicable (Roberts *v.* Ryer, 91 U. S., 157); and that this claim, not being for a combination of the springs S S with the collar pad, is for the springs alone. This claim may be subject to this construction, but I do not base my opinion upon this view of it, as it is palpable to my mind that the claim only covers the two springs S S when used together to fasten a pad to a horse collar, and that the use of one spring is not an infringement. In fact, the complainant must, I think, be held to have admitted that his first patent required two springs by his subsequent application for a patent on his single-hook attachment.

The second patent is for the elastic single spring S, constructed and arranged so as to clasp only the fore roll of the collar. It in no respect differs in construction, mode of operation, and result from the spring shown in the first patent, which was intended to encircle and hug the fore roll of the collar. In other words, the patentee has cut the two springs of his first patent apart, rejected the one intended to clasp the back roll of the collar, and taken a new patent upon the single spring or hook which fastened the pad to the fore roll of the collar in the first patent.

Undoubtedly experience in the use of the device covered by the first patent showed that the back fastening was practically unnecessary; that in use the pad was held sufficiently in place by the fore

fastening, and that the back fastening, if not a hindrance and
40 objection, could at least be dispensed with; but it did not require invention to reject this useless or superfluous back fastening and rely upon fastening to the fore roll of the collar.

Any teamster who had become tired of applying the two hooks where one was all that he deemed necessary could have broken off the back hook to save himself needless trouble and used only the fore hook.

This patent comes directly within the principle stated by this court in Stow *v.* City of Chicago, Biss., 47; 3 B. & A. S. C., 91, where it said:

"A reconstruction of a machine so that a less number of parts will perform all the functions of the greater may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before in the combination, can not be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all or less than it did before."

In his first patent McClain provided fastenings to the front and rear rolls of the collar. He found by use that the front spring alone was a sufficient fastening for practical purposes, and there was therefore no invention in omitting the rear spring from his device and using the front spring alone to perform the same functions it did in the first patent. It is true that when only the forward spring is used it enables the person using the pad to fix its location on the collar more readily than when two springs are used, as in that case
the two must be so located as to enable both springs to clasp
41 their respective rolls of the collar, and as the rolls of the collar diverge the double spring could fix the pad only at one place on the collar; but the convenience that may follow the use of this front spring alone does not give to this front spring any new function or features. In other words, it was nothing but a convenient mechanical adaptation of this first patent to the uses for which it was designed, to cut off one of these springs when experience had shown the back one was not necessary. The single spring shown in the second patent does not do all that was done by the two springs in the first patent, but it does enough for practical purposes. Mr. McClain having by his claim and specifications clearly limited himself by his first patent to the two springs used together as shown, I do not think there was any patentable novelty in dispensing with one of these springs, and hence conclude that the second McClain patent is void for want of novelty.

In regard to the Scherling patent, as already stated, it shows a common and well-known safety-pin combined with a hook of the same material and integral with the pin, the material being elastic wire, so that the hook may be secured or fastened to the pad by means of the pin, and the pad then attached to the collar by clasping the hook over the fore roll of the collar.

The drawings and specifications show two forms of this device. In Figs. 1, 4, and 5 of the drawings the safety-pin is shown, and in Figs. 2 and 3 the hook is attached to the pads by pins inserted in the

texture of the pad, with no safety loop or lock to hold the pin in place.

42 The proof shows that safety-pins, with hooks integral with the pins, are much older in the art than the Scherling patent. They are shown in the English patent of Montelart, of February, 1864; in the American patent of Moore, of March, 1869; in the American patent of Marston, of January, 1872; in the American patent of Jenkins, of August, 1880; in the American patent of Judd, of March, 1882, while the Canadian patent to McClain, the complainant in this case, of July, 1883, shows a pad fastened to a horse collar by a wire hook fastened to the pad by inserting therein a pin integral with the hook. The only difference that I can perceive between this patent and the two McClain patents is that this device, especially in the safety-pin form, gives an axial movement of the hook; but it seems to me that McClain had in view some mode of attaching the hook to the surface of the pad similar in its action and result to that obtained by the Scherling pin and hook. In both his patents McClain says, in substance, that he could deviate from his patent to fasten his springs to a surface piece and then fasten such surface piece to the surface of the material of the pad by stitching, and it will clearly be seen that by so doing some flexibility between the pad and hook would be secured, for the surface of the pad being of cloth quite a free movement of the hook back and forth would be obtained from the looseness and flexibility of the cloth.

But without saying that McClain anticipated Scherling in this particular, I am satisfied that with safety-pins and hooks combined, as shown in the Jenkins and Judd patents, there was no room for invention in substituting a safety-pin and hook such as are shown in the Scherling patent for the single hook or spring such

43 in the McClain patent of 1882. While McClain says in his single hook that he expected in practical operation to fasten his hook by means of rivets, yet, at the same time, as he does not confine himself specifically to that mode of fastening, I apprehend that any mode by which the spring could be fastened to the pad and secure the result intended to be secured by the patented device would be allowable and open to McClain. Hence, if in the device covered by his single-hook patent McClain found that it was better, on the ground of economy or for any other reason, to fasten the hook or spring, as he called it, directly to the surface of the material of the pad with a pin, or in any other manner which was practically useful, he would have had the right to do so under his patent of 1882; while his Canadian patent shows the use of a wire hook and spring fastened into the surface material of the pad by a pin, not a safety-pin, it is true, but by thrusting the pin into the material of the pad substantially as is shown in the Scherling drawings, Nos. 2 and 5.

But if I am wrong in this construction, I am satisfied that the defendants do not infringe the Scherling patent. The claim of that patent in substance is for a hook formed of wire with a safety-pin integral with the hook for attaching the hook to the pad. The claim says the pin is for the attachment of the hook to the collar, but this

is evidently a mistake, and it was undoubtedly intended that the safety-pin should attach the hook to the pad. The defendants do not use a pin integral with their hook for the purpose of fastening their hook to the pad, but the hook is fastened to a piece of leather in such manner as to give it an axial or rolling motion, and
44 this leather is riveted to the pad by rivets passing through the material of the pad. In view of the patents to McClain, this Scherling patent must be confined to the special devices shown and claimed, and cannot be enlarged or expanded by construction, because hooks, both double and single, with which to fasten pads to collars and performing the same function in the same way as is done by Scherling were shown in the two McClain patents now in suit, and also in McClain's Canadian patent; and hence, as the defendants do not use a safety-pin integral with their hook to attach their pads to the collars, they cannot be said to infringe the Scherling patent.

For these reasons I conclude the complainant's bill must be dismissed for want of equity.

James Moore, for complainant; Banning & Banning, for defendants.

Endorsed: Filed Jan. 9, 1888. Wm. H. Bradley, clerk.

45–300 On the same day, to wit, on the ninth day of January, 1888, in the December term of said court, 1887, in the record of the proceedings thereof in said entitled cause, before Hon. Henry W. Blodgett, district judge, is the following entry, to wit:

Decree.

EDWARD L. MCCLAIN
vs.
A. ORTMAYER & SON *et al.* } In Chancery.

Now again come the parties, by their solicitors, and the court, having considered the matters submitted herein, finds the equities with the defendants. It is thereupon ordered that the complainant's bill be dismissed for want of equity, at complainant's costs, and that execution issue therefor. Thereupon the complainant prays an appeal herefrom to the Supreme Court of the United States, which is allowed upon his giving bond, according to law, in the penal sum of one thousand dollars, with surety to be approved by the court.

~~REPLICATION.~~

CIRCUIT COURT OF THE UNITED STATES,

—FOR THE—

NORTHERN DISTRICT OF ILLINOIS.

EDWARD L. McCLAIN,
vs.
A. ORTMAYER & SON, ET. AL. } IN EQUITY.

The Replication of the above named complainant to the answer of the above named defendants.

This repliant saving and reserving to himself, now and at all times hereafter, all and all manner of benefit and advantage of exception which may be had or taken to the manifold insufficiencies of said answer, for replication thereunto, says, that he will aver, maintain and prove his said bill of complaint to be true, certain and sufficient in law to be answered unto; and that the said answer of the said defendant is uncertain, untrue and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto and not herein and hereby well and sufficiently replied unto, confessed and avoided, traversed or denied, is true; all which matters and things this repliant is and will be ready to aver, maintain and prove as this Honorable Court shall direct, and humbly prays as in and by his said bill he has already prayed.

PIERCE & FISHER,
Solicitors for Complainants.

JAMES MOORE,
Of Counsel

It is hereby stipulated by and between the parties to the above entitled cause, which stipulation is to be taken as evidence therein, that the defendant corporation "A. Ortmayer & Son" subsequently to the dates of the several letters patent upon which the bill of complaint is based, and prior to the commencement of this suit has made and sold horse collar pads having devices upon them formed of wire to enable horse collars to be detachably secured to them in all respects similar to the "Complainants Exhibit Defendants Manufacture" which was made by said defendant, and is stamped "A. Ortmayer & Son, Patented Dec. 8, 1885."

JAMES MOORE,
Of Counsel for Complainant.

BANNING & BANNING,
Solicitors for Defendants.

It is hereby stipulated and agreed by and between the parties hereto that printed copies of the specification and drawing of United States Letters Patent, such as issued by the United States Patent Office, may be offered in evidence by either party with the same effect as certified copies, certified by the Commissioner of Patents, could be used, and that no exception shall be taken by either party to the use of such copies as evidence upon the ground that the same have not been certified.

JAMES MOORE,
for Complainant.

BANNING & BANNING,
for Defendants.

It is hereby agreed and stipulated that the testimony to be taken in this cause may be taken before any Notary Public, at the selection of the party for whom any such testimony may be taken and that testimony already taken before a Notary Public, and that to be hereafter taken may be read in the cause the same as if taken by a special examiner appointed by the court.

JAMES MOORE,
for Complainant.

BANNING & BANNING,
for Defendants.

It is hereby stipulated and agreed by the parties to the above entitled cause that depositions taken for Complainant in rebuttal may be read in evidence, without any certificate or seal by the officer taking the same when both parties are present or represented by counsel at the taking of the same.

March 21, 1887.

JAMES MOORE,
for Complainants.

BANNING & BANNING,
Solicitors for Defendants.

It is hereby agreed and stipulated between the parties to the above entitled cause that all testimony to be taken in rebuttal may be taken from the officer taking the same by complainant's counsel, who may keep them in his posession and personally take them to the Clerk's office, or send them by mail, express or otherwise.

And it is further stipulated that each party shall print its own testimony and furnish to the other party copies of such printed testimony.

JAMES MOORE,
Complainants Counsel.

BANNING & BANNING,
Solicitors for Defendants.

It is hereby stipulated and agreed by and between the parties hereto, that in consideration of the fact that complainant has delayed the taking of his proof in rebuttal at the request of respondents counsel, that they might attend to other engagements, the time within which complainant shall close his proof is hereby extended to the 15th day of July, 1887.

JAMES MOORE,
Complainants Counsel.

BANNING & BANNING,
Solicitors for Defendants.

COMPLAINANT'S TESTIMONY IN CHIEF.

CIRCUIT COURT OF THE UNITED STATES,

—FOR THE—

NORTHERN DISTRICT OF ILLINOIS.

EDWARD L. McCLAIN,

vs.

A. ORTMAYER & SON, ET. AL. } IN EQUITY.

Examination of witnesses, on behalf of the Complainant under the 67th Rule in Equity, as amended, pursuant to the annexed notice.

Present James Moore Esq. for the complainant and Ephraim Banning Esq. for the defendant.

By request of parties it is ordered that these depositions be taken by question and answer.

BUCHANAN PERIN,

Special Examiner and Notary Public.

James W. See, a witness produced on behalf of the Complainant, being first duly sworn, deposeth and saith in answer to interrogatories propounded to him by Mr. Moore of counsel for the Complainant, as follows:

Q. 1. State your name, age, residence and occupation.

A. James W. See; age 36; residence Hamilton, O.; occupation, Consulting Engineer and Solicitor of Patents.

The complainant herewith offers in evidence Letters Patent No. 259,700 granted Edward L. McClain, June 20th 1882 for Pad for Horse Collars marked "Complainant's Exhibit McClain Patent No. 1."

Also Letters Patent granted said Edward L. McClain No. 267,011 November 7, 1882 for Pad for Horse Collars, marked, "Complainant's Exhibit McClain Patent No 2."

Also Letters Patent No. 298,626 granted John Scherling and L. D. Randall and Co. upon the invention of said Scherling, for Pad Fastening for Horse Collars, May 13, 1884 marked, "Complainant's Exhibit McClain Patent No. 3.

Also certified copy from the Patent Office of an assignment by said Scherling under said last mentioned Patent of his interest in said last mentioned Patent to Edward P. Robbins dated June 24th 1885, marked "Complainant's Exhibit Complainant's Assignment No. 1."

Also certified copy from the United States Patent Office of an assignment by Edward P. Robbins of his interest in said last mentioned Patent, to Edward L. McClain dated July 1, 1885, marked "Complainant's Exhibit, Complainant's Assignment No. 2."

Also certified copy from United States Patent Office of an assignment by L. D. Randall & Co. of their interest in said last mentioned Patent to said Edward L. McClain dated June 24, 1885, and marked "Complainant's Exhibit, Complainant's Assignment No. 3.

Q. 2. State what opportunities and experience you have had for and in comparing mechanical devices, and examining patents for inventions.

provision of pad, which permits the instant and the ready attachment of the pad to the collar by what may be called, almost, the simple act of presentation, and when the pad has been attached to the collar, it is immoveably held in the definite desired position, ready, however, for instant separation by a motion as simple as the motion of attachment. The system described in the patent is entirely free from dangling and perishable straps, and is also free from features which completely encircle the collar so as to interfere with, or be interfered with by the hames.

Let me explain that the hames lie in a groove on the outer surface of the collar. If the pad is attached by straps which encircle the collar and lie between the collar and the hames, the hames will interfere with the ready removal of the straps in detaching the pad; and if the straps encircle both the collar and the hames, the straps will interfere with the removal of the hames, and in both cases the straps are rapidly chafed and worn away by the hames.

The system set forth in the McClain Patent may be briefly described as grasping jaws attached to the pads and projecting outwardly therefrom and adapted to open to receive the rolls of the collar and to close thereon and make the attachment secure. These jaws engage only the fore and rear sides of the collar, leaving the outer collar groove free for the hames, the jaws not interfering with the attachment and detachment of the hames, and the hames not interfering with the opening and closing and holding action of the jaws. The execution of this system as set forth in the patent, was by forming two jaws at the opposite ends of a small piece of spring steel secured to the pad. The distance between the two jaws of a pair being adapted to the size of that portion of the collar with which the jaws were to engage. The jaws would open sufficiently to admit the collar and would then close sufficiently to grasp the collar and thereby hold the collar in place. The opening and closing movement of the jaws was rendered possible in the example set forth in the patent, by the elasticity or springiness of the material of which the jaws were formed. The first claim of the patent reads:

"As attachments to a sweat or other horse collar pad, the elastic springs S S. substantially as described, and for the purpose set forth."

In this claim the reference letters "s s" are letters which appear upon the drawing and are employed in the specification and are the features which open and close upon the sides of the collar as I have described and which I have denominated the jaws.

Referring now to defendant's manufacture, I find it to consist of a collar pad provided with a jaw permanently attached to the pad and adapted to open and close, by yielding elastic action, upon the fore roll of the collar to which the pad is to be attached. The jaw is attached to the pad by rivets. In defendants manufacture the jaws are not arranged in opposing pairs, as in the example in the patent. Instead, each jaw is single, so to speak, and engages the fore roll only of the collar. Aside from this difference the mode of operation and the office of the device appears identical with the device of the patent. It should be stated that the arrangement of the jaws singly, instead of in opposing pairs, so as to engage only the fore-roll of the collar, presents peculiar advantages and new results as compared with the double arrangement of jaws as in the example shown in the patent, at the same time retaining all the advantages which I have referred to as belonging to the new system of attachment. It appears to me that defendant's manufacture embodies fully the invention of the first claim of the McClain Patent No. 1 together with additional specific improvements upon the particular structure illustrated in that patent.

Q. 5. In the same way you will please compare the inventions shown, described and claimed in "Complainant's Exhibit Mc Clain Patent No 2" with "Complainant's Exhibit Defendant's Manufacture," state whether or not the inventions claimed in the two claims of the patent are embodied in the other exhibit, and give your reasons for such opinion as you may express.

A. The invention set forth in the patent No. 2 appears to be a specific improvement in the system set forth in Patent No. 1.

A horse collar, in the cross dimensions of its side pieces varies throughout the length of the sides. The sides are rather small at the top and become large as we proceed downwardly until we reach the widest portion, from which the size reduces toward the gullet. In the double jaw arrangement forming the example of the No. 1 Patent, the two jaws of a pair engage oppo-

site edges of the collar. The springing and opening and closing quality of the jaws permitted some variation in the size of the collar portion which they would properly grasp, but this variation was limited. It followed that the distance between the jaws must be arranged with some reference to the width of the particular portion of the collar where the engagement was to take place. Owing to the changing width of the collar sides, it followed that a double jaw of a certain size would not be properly adapted for being placed indiscriminately upon any portion of the length of the pad. A pair of jaws would have to be selected which were properly adapted to the width of the collar at the chosen point, or, with a given pair of jaws, a point of attachment must be selected where the width of the collar is adapted to the size of the jaws. Hence a pad would require to be constructed or selected, or especially adapted for special collars. It was to overcome this difficulty that the invention of Patent No. 2. was devised.

A horse collar is formed with a front and a back roll, the groove for the hames lying between the rolls. The change in dimension, or the tapering swelling of the sides which I have mentioned, is confined almost exclusively to the back roll of the collar. The fore roll of the collar is of substantially equal size throughout its length. The improvement set forth in Patent No. 2 consists in arranging a single grasping jaw upon the fore part of the pad in a position to engage only the fore roll of the collar. This combination insures that the jaw will suit all portions of the length of the collar equally well. If a pad will fit a collar, the front jaw arrangement will insure the perfect adaptation of the grasping device: hence rendering possible the adaptation of pads to collars, regardless of the general cross dimension of the collar sides, and regardless of the particular lengthwise location of the jaw upon the pad.

In carrying out the improvement referred to, the patent sets forth a single jaw of the same character as described in Patent No. 1 secured singly, with the front part of the pad in position to open and close upon and engage the parallel fore roll of the collar.

The claims of Patent No. 2 read as follows:

"1. As an attachment to a horse collar pad or other harness pad, and as a means of adjustably attaching a pad to a horse collar or other part of harness, the elastic single roll, or single

curved spring S. constructed, arranged, attached, and operating substantially in the manner shown or described, and for or with the purposes set forth.

"2. The combination, with a horse collar pad, of elastic single roll or single curve spring S. substantially in the manner shown or described and for the purposes set forth."

These claims, I think, sufficiently set forth the improvement as I have indicated it.

Referring now to "Defendant's Manufacture" it appears to embody a collar pad of the usual form, and arranged to fit as usual within a horse collar. The pad is provided with jaws to engage the collar grasp-like by the act of presentation, on the system of McClain's patent No. 1 and the jaws are arrranged singly upon the front of the pad so as to engage only the parallel fore roll of the collar precisely as and evidently for the purpose set forth and claimed in McClain's Patent No. 2.

In defendant's manufacture the jaws, instead of being formed of a strip of spring steel secured directly to the pad, are formed of wire bent to produce the outlines of the McClain spring strip, the attachment of the jaw to the pad being effected by uniting the heel of the jaw to the pad. In defendant's manufacture the jaw appears to be articulately attached to the pad whereby it apparently becomes endowed with the capacity for opening and closing flexure additional to that due to the elasticity of the wire.

Defendant's manufacture appears to embody fully and completely the invention set forth in the first claim of the McClain Patent No. 1 and also to the fullest extent the invention set forth and claimed in both claims of McClain Patent No. 2, and containing also the additional feature of the articulate junction before referred to which does not, to any degree whatever, interfere with the office of the jaw as set forth in both the McClain patents.

Q. 6. In the same way compare "Complainant's Exhibit McClain Patent No. 3," especially with reference to the invention specified in the first claim thereof, with "Complainant's Exhibit Defendant's Manufacture;" and state whether or not the latter exhibit embodies the invention referred to in the former, and give your reasons for such opinion as you may express.

A. The patent referred to appears to relate to a special construction of a jaw for carrying out the new system which I have

referred to in connection with McClain Patent No. 1, and to carry along with it the improvements covered by McClain Patent No. 2.

This patent, McClain Patent No. 3, shows the jaws arranged to engage a single roll of the collar, and this roll I assume from the appearance of the drawings to be the fore roll of the collar; that is, the roll which is of uniform size from end to end. The jaw is shown and described as being formed of wire, and is spoken of as being of the nature of a safety pin. By "safety pin" I understand to be meant a well known form of diaper pin provided with features to shield the point of the pin and thus secure safety against accidental pricking of a baby. Diaper pins are most always called safety pins, and I think that in the popular use of the term the true meaning and necessary attributes of the adjective have been overlooked. I think the term would be properly applied to a skeleton form diaper pin, whether it possessed the safety feature or not. The structures shown in the patent now under consideration are totally lacking in those features which I think give safety pins their popular name, and I therefore judge that the inventor has employed the term because his device presents many of the characteristics of the skeleton form of safety pins. The patent shows several forms of the device, all of which, however, are skeleton structures formed of wire, so as to produce a skeleton outline of a collar-grasping jaw as employed in the McClain system. In comparing this patent, McClain Patent No. 3, with Defendant's Manufacture, I will confine myself to the consideration of that form shown in Fig. 2 of the drawing.

That figure shows precisely the wire structure as embodied in Defendant's Manufacture. By this I mean that a jaw made from Fig. 2 of the drawing of the patent would be the jaw found in Defendant's Manufacture.

The first claim of the patent is as follows:

"1. The described safety pin and hook, formed of wire, consisting of the bows *b b*, and the part *a* connecting the bows, with suitable integral devices for attachment to the collar, formed upon the ends of the bows, substantially as described."

In this claim there appears to be a lack of proper punctuation; for instance, there are no collars formed upon the ends of the bows, and the "part *a*" does not connect the bows with the attaching devices. I presume a comma was intended after "cor-

necting the bows" and also after "collar." This suggested punctuation is in accord with the illustrations and description. I think the integral devices with which the bows and their connecting piece are to be provided are undoubtedly the parts indexed by the letters *e* in all of the figures of the drawing, and specifically by the letters *e'* of Fig. 2. The first claim would appear to be intended as a generic claim which may comprehend any of the species, thus including the species shown in Fig. 2. The first claim appears to cover the species shown in Fig. 2, and Defendant's Manufacture embodies precisely that structure. Hence, it appears that Defendant's Manufacture embodies the invention of the first claim of the McClain Patent No. 3.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 7. The devices for connecting the pad to the collar, described in the two McClain patents, Nos. 259,700 and 267,011, are springs technically, are they not?

A. Yes, sir, technically they are springs.

X-Q. 8. They are just alike in construction except that the latter patent shows a "single-roll" or "single-curved spring," while the first-named patent shows two-roll springs?

A. So far as the structure of the springs themselves is concerned you are correct.

X-Q. 9. Using your own words, so far as the structure of the springs is concerned, the spring of the second McClain patent is, for example, just like the spring *S* at the left end of Fig. 3; that is, the spring almost directly under Fig. 4 of the first McClain patent, is it not?

A. I suppose that by "spring" you mean the part projecting outward from the pad, and in that case the conditions are precisely as you state.

X-Q 10. Please answer my question with the understanding that it refers to the "the part projecting outward from the pad" and also extending along and lying against the pad to the extent necessary to be secured by a rivet say to a point directly above the reference letter *P* of Fig. 3 of the first McClain patent.

A. That much of the double-spring shown in Fig. 3 of McClain Patent No. 1, if that much of the spring be assumed as dis-

connected from the balance of the spring, would be identical in structure with the single spring of McClain Patent No. 3.

X-Q. 11. As I understand you, you consider the defendant's fastening as being a spring; is this correct?

A. Yes, sir; as I understand the matter; that is, the mode of operation of the device. To further define, the jaw of Defendant's Manufacture appears to be of spring steel and adapted for opening and closing on the fore roll of a horse collar substantially as the springs of the McClain patents.

X-Q. 12. Springs similar to those shown in these two McClain patents were old and well known long before either of McClain's inventions was made, were they not?

A. No similar example occurs to me; but if you refer to structures of spring steel and in bow form, I think they might be found, because springs have been made in so may forms; but I know of no device like the McClain spring, regardless of its purpose.

X-Q. 13. Were not flat steel springs in bow form used generally for connecting or fastening one thing to another long before either of the McClain inventions were made?

A. I cannot at present call one to mind, even as thus broadly stated.

X-Q. 14. As I understand you, horse collars, and sweat pads adapted to be detachably fastened thereto, were both old and well known before McClain entered this field of invention?

Question objected to for ambiguity.

A. Horse collars were old, and pads which could be secured thereto were old, as I distinctly stated in my direct examination; and the means by which the securing was affected were such as, with the difficulties and objections noted, to permit detachment of the pad from the collar.

X-Q. 15. Then do you not find the only ground on which to base a claim of novelty in the subject matter of McClain's two patents to consist in the peculiar construction and mode of operation of his "two-roll springs" and his "single-roll spring" respectively?

A. I understand your question to have reference to the condition of the field of invention open to McClain. My understanding is that McClain invented a radically new principle in the

method of attaching pads to collars: that he was the first to enter upon the field comprehended by this principle; that had it been permissible for him to claim a principle, his claim might have been as broad as the principle; but no claim to a principle being admissible, his claim is for the combination structure by which the principle is made available. Briefly, it appears to us that the field of invention was open for a pioneer, and that McClain entered that field as a pioneer. The new principle involved I would define as the jaw principle as distinguished from the screw principle or encircling strap or string principle to which I referred in my direct examination.

X-Q. 16. The McClain patents show and describe a spring or springs having sufficient elasticity in themselves to accomplish the objects specified?

A. That is the way I understand it, as the examples are set out in the patents.

X-Q. 17. And so far as the function of attaching or fastening the pad is concerned, these springs would operate as well if the collars were made of wood, or any other hard or solid material, as they now operate with collars made of stuffed leather?

So far as the invention of McClain Patent No. 2 is concerned, the device would, I think, work perfectly with a wooden collar; but in the device McClain Patent No. 1, I think it will be found that the elasticity edgewise of the collar will permit a greater range in the selection of a point along the length of a collar at which the double spring may properly fit. Discarding this capacity of the stuffed collar, the invention would work properly with a wooden collar.

X-Q. 18. How do you find McClain's "two-roll springs" described in his first patent, in the Defendant's Manufacture?

A. Viewing the McClain patent No. 1 as for the generic invention under the grasping principle, the invention of the patent would appear to be involved in the employment of a single grasping spring, which I would view as obviously subordinate to that principle, regardless of whether that single spring grasped the fore roll or the back roll of the collar. The specific two-roll spring is obviously not in Defendant's Manufacture when viewed specifically, but when the elastic spring of the patent is viewed generically, in connection with its attachment, adaptation and

mode of operation, it is obvious that such spring is in Defendant's Manufacture. In other words the horse collar pad, "Defendant's Manufacture," has no means for attachment to a horse collar not included generically in the first McClain invention.

X-Q. 19. Do you find in the Defendant's Manufacture any "safety pin" capable of being inserted or stuck directly into the pad?

A. As I define "safety pin" there is no safety pin about Defendants Manufacture. As safety pin is illustrated in McClain Patent No. 3 in Fig. 2 thereof, a safety pin is found in Defendants Manufacture, and that safety pin can be inserted or stuck directly into the Pad.

X-Q. 20. Do you mean, that it can be so inserted or stuck directly into the Pad practically, for the purpose of securing it thereto for ordinary use?

A. I think so.

X-Q. 21. The Scherling Patent says that the safety pin is attached to the pad "by passing the pin through the pad or the covering of the pad in the ordinary manner, as shown in Figs. 4 and 5." Do you consider that the defendants' fastening device can be thus attached or secured to the pad practically or for ordinary use?

A. The Scherling Patent illustrates three species of the structure, each differing from the other. In Figs. 4 and 5 he shows two species attached to the pad, but nowhere does he show attached to the pad the species of Fig. 2. If he had shown it, I presume he might have shown it engaging directly the covering of the pad, and the jaw of Defendants Manufacture can be attached directly in that precise manner. However I do not think any of the species would be highly desirable, for the reason that too great a strain becomes imposed upon the covering of the pad. Practically this might be overcome by reinforcing the weak pad covering with leather or other strong material at the point where the strain comes, but no such reinforcement is referred to in the patent.

X-Q. 22. Then you consider the mere construction, or constructions, shown in the patent, as incapable of practical use, do you not?

Objected to as irrelevant and immaterial. for that the Scherling attachment to the pad is not a portion of the first claim

of Scherling which is the only one in issue; and second, that defendant is estopped to deny the utility of the invention set out in the first claim, inasmuch as they use it exactly as shown.

A. You misunderstood me entirely. I was not criticizing the capability of any of the species, but I questioned the high durability when attached directly into the covering of the Pad. However I do not understand that the device of Fig. 2 attached directly into the covering of the pad would not be highly valuable, and, if attached, by more durable material, as useful and valuable in every way as any of the species of grasping jaws shown in any of the patents.

X-Q. 23. Do you consider the doubled or folded leather, riveted to the pad to and by which the metallic hook is fastened in the Defendants Manufacture, to be part of their pad, or pad covering proper?

A. When this leather is secured to the pad as it is in Defendants Manufacture, it would appear to be simply a portion of the pad-covering adapted to furnish a durable bearing at which to attach the jaw, or the "safety pin and hook" of Fig. 2 of the Scherling patent.

X-Q. 24. Do you consider that special forms shown in the Scherling Patent are at all material, or would a safety pin having its bows *b b* side by side, or adjacent to, or touching each other, be within the first claim of the patent?

A. I understand form and proportion to be essential only as restricted by operativeness, and I do not understand that the narrowing of the double bow and the consequent shortening, almost to suppression of the "part *a*" of the Scherling device would free it from the domination of the patent.

X-Q. 25. As I understand you, you consider the first claim of this Scherling Patent, as generic, or broad enough to cover all the forms of "safety pin and hook" shown or described in its specification or drawings.

A. I can only say as a matter of opinion, that after reading the specification in connection with the drawings to find out what the claim is about, it would appear that any and all of the structures shown and described, will respond to the terms of the claim.

JAMES W. SEE.

Defendant's counsel states that the files of Edward L. McClain's application for patent No. 313,606, issued March 10, 1885, show that an opinion of Mr. James Moore, complainant's present counsel, was presented and used in the patent office against the Scherling patent now in suit, and requests the production of such opinion for use in this cause.

Complainant's counsel replying says, without placing any stress or attempting to explain that peculiar step, which obviously arose from great zeal and small experience in the solicitor, if counsel for respondent had requested off the record that I should show him the said opinion, I should have made due inquiry for a copy of it and exhibited it to counsel; but having demanded it as matter of right, counsel for respondent is informed that that was a private communication between complainant's counsel and his client and never became a public matter or matter of record, as the file to which respondent's counsel referred will show if produced. Consequently complainant's counsel very respectfully declines to comply with the request.

COMPLAINANT'S TESTIMONY IN REBUTTAL.

WILLIAM H. HAYS.

Q. 1. What is your name, age, residence and occupation?

A. William H. Hayes; I am 35 years of age, am in the Harness and Saddlery business at 495 West Van Buren Street, Chicago.

Q. 2. What, if any, experience have you had in the trade of Pads for Horse Collars, and how long a time have you been familiar, if at all, with such devices?

A. The only experience I have had with them is in making and selling them.

Q. 3. How long have you had experience in making and selling such pads?

A. Well, to a greater or less extent, for the past nine years.

Q. 4. When did you first see a collar pad with a hook for detachably grasping the rim of a collar, thus securing the two together upon the collar and pad?

A. Well, I can't give the exact date. I don't remember having seen one before that purported to have been manufactured by McClain & Anderson, now the E. L. McClain Mf'g Co.

Q. 5. Are you in the wholesale or retail Harness business?

A. I am in the wholesale and retail Harness business.

Q. 6. Do you, as such dealer, handle pads manufactured by E. L. McClain & Co., formerly McClain & Anderson?

A. I do. Well, our predecessors, Garfield Mf'g Co., handled them, and we have handled them since last August or September.

Q. 7. Were you connected with the Garfield Mf'g Co., your predecessors, and if so, how?

A. I was; as an employee.

Q. 8. State, so far as you know, what has been the effect upon the market for pads manufactured by the Garfield Mf'g Co. and your present firm, which, as I understand, did not have the detaching hook device attachment, of the introduction to the market of the McClain pads with the detaching hook devices?

A. Well, I presume as far as sales are concerned, we sell the McClain pad to three-fourths of our trade; or, I presume, 75 per cent of our trade in sweat pads is on the "Success Pad."

Q. 9. Is this the consequence of efforts upon your part to push the McClain pad ahead, or is it something that you couldn't help? What is the fact in relation to this?

A. I suppose there is more than one reason that I could give. First, the manner in which the "Success Pad" has been advertised by the manufacturers; second, because we made no effort to decrease the sale of the "Success Pad," and no special effort to increase the sale of our own; and, third, because I presume there was some merit in the patent, which I understand to be the hook in connection with the pad.

Q. 10. Is it or not the fact that this manufactured pad with spring hook attached has had a phenomenal success in the demand for it?

A. Well, I don't know. It depends upon what you understand by the word "phenomenal." I have seen what purported to be testimonials from people who have handled the "Success Pad," who considered the success of the pad phenomenal.

Q. 11. Well, what do you think about it?

A. I think the pad has certainly met with great success. In the time we have handled it I have yet to hear of the first complaint concerning it.

Q. 12. What, if any feature of construction of this pad, has been a substantial cause of this success?

A. Well, I imagine that the hook attachment has had much to do with it in the first place; and second, the workmanlike manner in which the pad is made.

Q. 13. The pads that were made by the Garfield Manufacturing Company, and are now being made by your firm, how were and are they attached to the collars?

A. By leather straps principally; but in some special cases perhaps some other mode of attachment.

Q. 14. I assume that you would rather sell your own pad than the McClain Pad, wouldn't you?

A. When we can make more money on it, yes; when we can not, no.

Q. 15. You have answered with reference to the increase of your own sales of the McClain pad. Have you any information as to how general the success, territorially considered, of the McClain pad?

A. None; except what has been furnished by trade journals and testimonials in the E. L. McClain Co.'s catalogue.

Q. 16. Well, without reference to McClain's catalogue, what is your information, gathered generally from the trade, as to the extent to which the McClain adjustable hook pad has taken the place of other pads without the adjustable hook?

A. I don't know that I have any information outside of our own experience in selling them. With our own customers I think they have replaced sweat pads of our own manufacture to the extent probably of 75 per cent of our total sales on pads.

Q. 17. I want your opinion. Suppose that McClain in making pads had applied the strap and buckle mode of fastening, omitting the grasping hook. Do you think that the McClain pad would have eaten into your own trade as compared with your own manufacture?

A. If the McClain pad had been advertised as it has been, I think it would have had some effect upon the sales of our own pad, but perhaps not to as great an extent as the present patent pad has.

Q. 18. Have you ever used any of these hooks, or do you know anything as to the advantages arising out of their use?

A. We have never used the hooks separate from the "Success Pad." The advantage seems to me to be apparent by simply looking at it, so far as the convenience of the fastener is concerned.

CROSS-EXAMINATION BY THOMAS A. BANNING, ESQ.

X-Q. 19. How long have you personally had anything to do with the manufacture or sale of collar or sweat pads detachably connected to the collar?

A. About nine years ago I made my first pad, and for a course of three years made and sold personally sweat collar pads in a small eastern city. Since then have not personally manufactured sweat pads.

X-Q. 20. How were they connected or attached to the collar?

A. By leather straps and buckles, I suppose. Sometimes tied and sometimes buckled.

X-Q 21. What do you mean by saying that the sale of the McClain pad has "replaced" about 75 per cent of the sales of your own pad?

A. I mean that where we formerly would have sold one hundred pairs of our own manufacture, we sell to-day probably seventy-five of the "Success" and twenty-five of our own.

X-Q. 22. You do not mean then that your old customers threw aside your pad in order to replace or supplant them with the complainant's, do you?

A. I do not mean that they threw ours away, but that in making new orders the proportion of the "Success Pad" to our own is as above stated.

X-Q. 23. Did you attempt to force the sale of your pad, or to compete with the complainant's pad?

A. We have made no special effort to sell our sweat pads over and above other lines of our manufacture.

X-Q. 24. Which pad did you sell at the lowest price, your own or the complainant's?

A. Well, we make different grades of pads, and so do complainants. The facts that all know are that they have pads running from, as per their price list, from $5.25 to $6.50 a dozen pair. We make a sweat pad for less than $5.25, and we also make a pad that we sell for more than $6.50.

X-*Q.* 25. What would be the average price be at which the 75 per cent of the complainant's pad sold, and the average price at which the 25 per cent of your own sold?

A. I believe that the average of the "Success" would be $6.50 per dozen. I do not know just what the average price of our own would be; I believe that it would be under that figure.

X-*Q.* 26. Then you have dealt principally in the best quality of the complainant's pads?

A. Our principal sales have been in what I consider the standard or more popular number, which is their number two. What I mean by "average price" is the price at which we sell to the wholesale or harness trade.

X-*Q.* 27. Has their been any sweat pad, to your knowledge, that has been advertised or pushed in the trade any thing like as vigorously, extensively and thoroughly as the complainant's?

A. I do not know of any sweat pad which, in my judgment, has been advertised as judiciously as the "Success Sweat Pad."

X-*Q.* 28. State a little more fully what you mean in speaking as being "advertised judiciously."

A. By using the words "judicious advertising" I mean advertising that brings results; or, in other words, proper advertising.

X-*Q.* 29. You have been asked if the complainant's pad has not had phenomenal sales. I will ask you if it has not had phenomenal advertising?

A. I will answer that as I did the other question in regard to sales, by saying it depends upon what way you interpret the word "phenomenal" to mean. I think the pad has been well advertised.

X-*Q.* 30. If by phenomenal sales are meant unusual sales, how would you answer the above question?

A. Well, I think the "Success Pad" has had unusual advertising as relates to sweat pads.

X-*Q.* 31. Then, if the complainant's sweat pads has had phenomenal sales, understanding the word phenomenal as meaning unusual, you would say they have also phenomenal advertising, understanding the word phenomenal as meaning unusual?

A. Yes; so far as it can mean extensive and judicious advertising.

X-*Q.* 32. What kind of a sweat pad have you referred to when you have spoken of the "Success Pad?"

A. The "Success Pad" that we are at present buying of the E. L. McClain Manufacturing Company of Cincinnati. One of them I looked at the other day seems to be like this one, "Defendant's Exhibit McClain Single Roll Spring;" but I don't examine all the pads that come into our house.

X-*Q.* 33. Then, as at present advised, the "Success Pad" which you have been selling is like this exhibit just referred to?

A. I don't know that I have noticed more than one pair of pads of last shipment. I do not remember that we specified in our order the particular style of fastener wanted, simply asking for the "Success Pad" and gave the number wanted.

X-*Q.* 34. Then, as a matter of fact, you do not know and are unable to state what kind of pads of the complainant's manufacture you have been selling?

A. Inasmuch as I do not check, personally, as to quantities and styles, all bills that we receive, I could not personally vouch for the particular style of fastener used on these "Success Pads" which we have been handling.

X-*Q.* 35. These pads that you made and sold nine years ago, and which you make and sell down to the present time, which were attached by straps, were detachable and could be taken off and put on at pleasure, is correct.

A. The pads first made by me personally could be placed upon or taken from the collar by tying or buckling, or untying or unbuckling, as the case might be.

X-*Q.* 36. What year was this and at what place?

A. It was about eight or nine years ago; let me see; well, about the year 1879, at Greensburgh, Penn.

X-*Q.* 37. Was it as early as 1879?

A. I am not positive; but if my memory serves me correctly even earlier than that, possibly '78–'79, and made them for three years.

X-*Q.* 38. What was done with the pads you thus made?

A. They were sold to customers of my employer, Mr. A. P. Smith, of Greensburgh, West Moreland County, Pa.

RE-DIRECT.

R-D. 39. When you expressed doubt in a preceding question as to the sort of grasping hook attached to the McClain pads that you at present deal in, these two exhibits, to-wit, Defendant's Exhibit McClain's Present Attachment and Defendant's Exhibit McClain's Exhibit Single Roll Spring, were lying before you, and it was as to which of these two hooks that the doubt was expressed. Am I correct in this?

A. I am in doubt as to which of the two hooks used on the pads referred to.

R-D. 40. You advertise quite extensively, do you not, a general line of saddlery ware, collars, etc.

A. We consider ourselves fairly well advertised.

R-D. 41. Has it been the result of your observation of this advertising that it has enabled you to displace other similar manufactures to the extent of 75 per cent or any reasonable proportion of that fraction? In other words, does or would your experience in advertising justify an opinion that the success of the McClain pad and hook was due largely or mainly to advertising?

A. We are not so happy as to believe that we have succeeded in displacing the goods of other manufactures by advertising or

otherwise. I do not consider that the success of the McClain pad was due mainly to advertising; but I think it has something or much to do with it.

RE-CROSS.

X-*C.* 42. At the time McClain began to push his sweat pad in the trade, were sweat pads specially advertised or pushed by others?

A. I do not know.

X-*C.* 43. At that time were you specially advertising or pushing that line of your business?

A. At that time I was simply an employee of the Garfield Manufacturing Company, and they were not making any special effort for the sale of their sweat pad.

X-*C.* 44. Will you state, of your own knowledge, that the complainant's pads you have been selling, and which you say have constituted about 75 per cent of your sales of sweat pads, were like either one of these two, exhibits McClain's Single Roll Spring and McClain's present attachment, to which your attention has been directed?

A. Personally I can not.

RE-DIRECT.

R-D. 45. Do you know whether the McClain pads you now sell have the hook device for grasping the collar?

A. What I have seen had, and I have reason to believe that all of them have.

WILLIAM H. HAYS.

Q. 1. What is your name, age, residence and occupation.

A. George F. Brigham, I am 56 years past, I reside in Chicago, Illinois, I am in the saddlery hardware business, P. Haden's Saddlery hardware business of this city. I am the buyer for said firm. I have been connected with that firm for 42 years.

Q. 2. State whether that house deals in collar sweat pads, how long it has been dealing in these articles, and how extensively it deals in them.

A. We are dealing in sweat pads; have no doubt sold sweat pads more or less for the past 25 years. For the past few years the sale on sweat pads has been increased quite largely.

Q. 3. What is the cause in the rapid increase in the sale of sweat pads in the last few years, if you know?

A. I attribute the increased sale of sweat pads to the improvements that have been made on them.

Q. 4. What are these improvements, and state what of any of these improvements is the moving cause of this increased sale?

A. I think the cause of the increased sale is the different devices that have been put on to sweat collars, to fasten the sweat pad to the collar.

Q. 5. Where did you first see, that is on whose manufacture, these improved devices for attaching the sweat pad to the collar?

A. Anything in the way of a metal attachment or hook, was first shown to us by McClain & Anderson of Greenfield, Ohio.

Q. 6. Examine the sweat collars lying before you marked respectively defendant's exhibit McClain's present attachment, and McClain's exhibit single roll spring, and state how these compare with the devices you first saw, and whether you saw sweat pads with either of those fasteners on?

A. I would say that there is a great similarity to them. I would not be positive. They are the same used by E. L. McClain & Co.

Q. 7. How extensively, if at all does your house deal in these McClain pads furnished with these attaching hooks?

A. I should say our trade would be in the neighborhood of $4000 a year, something inside of 1000 dozen; that is with the hook attachment.

Q. 8. How would this compare with your trade upon all other kinds of pads without the hook attachment.

A. I think it is fully seven-eighths (7/8) of our entire sales on sweat pads.

Q. 9. Please give us some idea for comparison of the amount of your sales of sweat pads per annum immediately preceeding the introduction of those having the hook attachment?

A. I think the sale on sweat pads with our firm was not far from one-third of the amount it is at present.

Q. 10. To what do you, and the trade generally, if you know the latter, attribute this great increase in the sale of pads?

A. Well, I would not be willing to answer only for myself. I think the increase of sale on pads is attributed largely to the new devices that have been put on them for the past few years; I mean the devices that have been put on to the sweat pads for attaching them to the collars.

Q. 11. Do you know whether this increase in your sales represents in substance, an increase in the use of sweat collars, or a drawing to your house a trade that had previously gone to other houses?

A. I think sweat collars have been in quite general use for a great many years- Mostly the common sweat collar made largely by a few manufacturers for the harness trade; the larger portion made by the harness makers themselves. I will add, who have bought largely of their sweat collars since the new styles have been brought out, which will show, as far as our trade is concerned, increase of sales.

Q. 12. As I understand you are not sure as to whether the hooks shown on the two exhibits, "McClain's present attachment" and "McClain's single roll spring," correctly represent the Mc Clain sweat pads that you now deal in. What I would ask: is this from the fact that you are not in the habit of handling these devices in the store, or is it because you see something in connection with either of the exhibits that is unfamiliar?

A. As I said before, I think they are very similar, but would not be willing to swear that they are. It has been some time since I have taken particular notice of the hook attachments used by the E. L. McClain company. Other devices having been shown to me that were quite similar to those used by the E. L. McClain Co.

Q. 13. Who manufactures these other similar devices?

A. Well, one was shown to me through sample, by L. D. Randall & Co. of Dubuque, one by Duguid & Wells of Syracuse, N. Y., one by a certain party in St. Louis by the name of Summers, his initials I cannot give. Others may have been shown to me, but I do not now recollect by whom.

Q. 14. Are you not familiar with one freely used by A. Ortmayer & Son of this city?

A. I would say that I am not familiar with any pad made by A. Ortmayer & Son, since they manufactured the one with strap. Now I recollect of seeing the one placed before, complainant's exhibit-defendant's manufacture, I will say further, that in but a few instances, that we had occasion to see it.

Q. 15. As I understand you have seen samples of these grasping hooks made or to be made by the Summers firm of St. Louis, L. D. Randall & Co. of Dubuque and Duguid & Wells of Syacuse; but do you know as a matter of fact that either of these firms are now actually making pads furnished with these grasping hooks?

A. I do not know that they are now being made by either of these parties mentioned, they not having been brought before me for perhaps six months.

CROSS EXAMINATION BY MR. BANNING.

X-*Q.* 16. You have stated that you have been with the firm of P. Haden's house for 42 years. Have you not been a member of the firm of Brigham & Jones?

A. My testimony was that I had been with P. Haden 42 years excepting the time that I was in business for myself.

X-*Q.* 17. What manufacture of sweat pads does the house with which you are connected sell?

A. We sell E. L. McClain & Co's pads. P. Haden saddlery hardware Co's pads made at St. Louis, pads made by A. Ortmayer & Son. Pads made by S. Risser & Co. These embrace all the pads we sell at the present time.

X-*Q.* 18. Look at these letters patent sued on in this cause, to E. L. McClain No. 267011, of November 7, 1882; No. 259700 of June 20, 1882, and of patent to J. Scherling No. 298626 of May 13, 1884. And state whether you understand the kind of fasteners shown in these patents?

A. I only understand them as I see them on the manufactured goods. I understand them when I see them in use or on manufactured goods. I am not familiar enough with drawings to give an opinion as to their merits.

X-*A.* 19. Have any of the complainant's sweat pads which you have sold, as you have testified, been like those shown in these patents?

Complainant's counsel objects for the reason apparent, that the witness has not read the patents and does not understand the drawings.

A. As I said on the direct, I thought they were very similar to the exhibits, McClain's present attachment and McClain's single roll spring.

X-*Q.* 20. When did you first see a detachable sweat pad fastened to the collar by hooks or clasps?

A. I think it was in the first year the goods were manufactured by McClain & Anderson. Samples being sent to us for our opinion and orders on the No. 1 and No. 2 "Success" pads.

X-*Q.* 21. As I understand you harness makers formerly or until the last few years were in the habit of manufacturing sweat pads for their customers, but that they now, as far as your knowledge goes, generally buy them off firms dealing in saddlery hardware like your own. Is this correct?

A. As I said before, they bought sweat collars off a few manufacturers who made what we call common sweat pads, and the sectional pad; also a pad made in Ohio called the "Ohio 'pad." But as a general thing the harness makers made their own, that is any styles that they could make of ticking and enameled cloth with such hair as is now used by most of manufacturers.

X-*Q.* 22. But now the trade is generally absorbed by wholesale houses like your own. Is it not.

A. It is.

X-*Q.* 23. Instead of the harness makers making for their customers as heretofore, is this correct?

A. It is.

GEO. F. BRIGHAM.

Q. 1. What is your name, age residence and occupation?

A. A. F. Risser, my age 55 years. I am in the saddlery business, learned the trade in 1853. I reside in Chicago.

Q. 2. What, if any experience have you had in manufacturing and selling sweat pads to put under horse collars?

A. I had more or less experience during my business life. We always made some sweat pads. In latter years we have made more, that is the trade has increased in them, what we call the jobbing trade.

Q. 3. State if you are familiar with the pads made by McClain & Anderson and E. L. McClain Co., having attached to them a metallic hook attached to the roll of the collar, and how long you have been familiar with them.

A. We have handled the pads more or less for several years, bought and sold them, and found a very ready market for them. There has been during the season, when they were used, a good demand.

Q. 4. Do you manufacture pads, and if so what styles of pads, yourself?

A. We make quite a good many pads of different numbers, there are different styles. We have made more of what we call the "sectional pads" during the last few years. It is patented by Benoit, Stone and Benoit owned the patent. Then we make what we call the Ohio pad, it is similar to this one only we don't use any hooks.

Q. 5. When and of whose manufacture did you first see a metallic hook for clasping the roll of the collar?

A. To the best of my recollection on what is known as the "Success" pad, well I think I, we have handled them for three years, perhaps four years, I am not sure.

Q. 6. What was the effect upon the market demand for other pads, of the introduction of the McClain's or "Success" pads with the hooks referred to?

A. Why there is more pads sold since the "Success" came on the market than there were previous, in my judgment. We have sold less sectional pads since the "Success" came on the market; that is the demand for the "Success" has increased, and the "Sectional" with us has fallen off some. On the other hand

we have sold more during the last few years, of what we call the "Ohio" pad, has no hook, but uses a strap in place of the hook as a rule. Still our trade on that has not been very large.

Q. 7. Will you please give us an approximate estimate of the amount of your trade at the present time on the McClain pad, as compared with all other collar pads, which have not these clasping hooks?

A. That is a difficult question to answer. It is very difficult for a man to carry his business in his head. I think we have sold more pads in the last two years of our make, than we have of the "Success."

Q. 8. Was the sale of your own largely in excess of that of the McClain pad. or is it a matter in which you are in doubt, as to which you sold the most of?

A. In my judgment we have sold quite a good many more pads of our own manufacture. I am in doubt during the time we have handled the "Success," which I think is three years, taking all the numbers, than we have of the "Succeess" so far this year, 1887. I am in doubt which we have sold the most of, so far, this year.

Q. 9. Then the McClain pad has been regularly increasing, has it not, in its sale up to date?

A. It has in my judgment.

Q. 10. You have a reputation, have you not for making pads of good workmanship and material?

A. I wouldn't like to say that we have or haven't. I feel that we have.

Q. 11. What has been your chiefest difficulty in reference to the McClain pad. To sell them or to get them to supply the demand from you for them?

A. Why, we haven't made a strenuous effort to sell the McClain pad, we have always tried to sell our own make, and in the busy season for pads, we have often had trouble to get enough to supply the demand that we had. This I presume was because of our not placing our orders large enough, or early enough, as we should have done.

Q. 12. How is it with reference to supplying the demand for your own manufacture. Have you always been able to supply it promptly?

A. We have not. We would almost every season run short on some lines of our pads.

Q. 13. What feature of McClain or "Success" pad is it that has given it popularity, if you know?

A. The hook is the only thing, that I think it has. The hook and its adjustment to the collar.

Q. 14. Which do you sell at the highest price, your own pad or the McClain pad, corresponding work and material?

A. The McClain pad.

Q. 15. In round numbers, about how much does the McClain pad average per dozen, above the price of your own manufacture?

A. In the neighborhood of a dollar.

Q. 16. Have you any information as to what degree of success or popularity the McClain pad has had, and is getting in the market generally, apart from your own trade?

A. It is popular so far as we know, and has had large sales.

Q. 17. Considering the length of time that it has been before the public, would you, or would you not consider, that its success was phenomenal?

A. It certainly has had a very large sale, and more so than any other pad, that has come to my knowledge.

Q. 18. You have stated, that in your judgment the reason for its great success or popularity is to be found in the metallic grasping hook attached to the McClain pad. What I desire to ask you here is, whether it is according to your information, that the trade generally attribute the success and popularity of this pad to these grasping hooks?

A. I so understand it.

Q. 19. Is there any such superior merits in the manufacture of these "Success pads, whether in material or workmanship, that would have given to them the popularity they have, if the grasping hooks were omitted?

A. I think not.

CROSS-EXAMINATION.

X-*Q.* 20. How has the complainant advertised his sweat pads, extensively or otherwise?

A. Why I think he has advertised them extensively, so far as I know.

X-Q. 21. Have they not advertised them with great thoroughness and extensiveness?

A. I saw the advertisements in several of the Trade Journals, and I have received a great many circulars from them.

X-Q. 22. Have you advertised your sweat pads as extensively, as you understand the complainant has his?

A. We have advertised ours by circulars, and some in the Trade Journals; but I doubt if we have given it as much attention in that direction as the complainant has.

X-Q. 24. With you the manufacture and sale of sweat pads, is only one item in your business, is it not?

A. Yes sir.

X-Q. 24. While, with the complainant it is the sole business is it not?

A. I couldn't answer that, of my own knowledge, all the business we have had, is of buying the sweat pads. I have no knowledge of their doing any other business.

X-Q. 25. Do you not know, either personally or from the understanding which prevails in the trade, that the complainant, and those who operate with him, have advertised and pressed the sale of their sweat pads with extraordinary diligence and vigor?

A. My understanding is that they have advertised, as I said before, but that they have no men out soliciting trade, but they have not called upon us.

X-Q. 26. Do you desire to say, that with equal advertising other sweat pads, for instance those you make yourself, could not be brought into as large a demand as the complainant's pad?

A. I think it is doubtful whether we could have sold as many of our make of pads, without some appliance that would have been equally handy as the metallic hook.

X-Q. 27. Do you wish to say, that this vigorous and energetic course of advertising on the part of the complainant, has had no part in creating a demand, which you say exists for the McClain pad?

A. No sir.

X-Q. 28. Your house I believe is a jobbing house, is it not?

A. It is so considered, jobbing and manufacturing.

X-Q. 29. I will ask you if there is not a combination among the jobbing houses to sell the McClain pad, and keep up prices?

A. So far as my house is concerned there is no combination. We have simply agreed with the manufacturers of the "Success" pad, to sell at a stipulated price, which I understand is their mode of doing business with the jobbers.

X-*Q.* 30. Is it not your understanding, and have you not been so informed by the complainant, that all houses who handle their pads make the same agreement?

A. I so understand it that all the jobbing houses do, whether they sell to the retail trade without this agreement, I don't know.

X-*A.* 31. Do not the prices fixed by this agreement with the complainant, enable you to make a greater profit from the sale of the McClain pads, than from the sale of your own?

A. We have always preferred to sell our own pad. I think the margin on the McClain pad now is as good, as it is on ours.

X-*Q.* 31. Is it not greater?

A. Without referring to our books, I could not say, whether it is or not on this grade of pads. It is better than it is on cheap pads.

X-*Q.* 32. Is not the profit, on what you have termed the "Success" pad greater than on your own?

A. That is the same question as stated before. I would have to refer to our books to be positive as to which affords the best margins, the "Success or our pads of the same grade. I think that our pads of the same grade affords us a little better margin than the "success." That is my opinion now without referring to the books. The lower the grade of pads, that is the cheap pads, are sold at a very low margin, as near as I can judge now, at less margin than the success.

X-*Q.* 33. Have you not stated in your direct, that your sales of the McClain pads average about one dollar per dozen more, than the sales of your own?

A. I said of about the same grade. We make pads that we sell higher than the McClain pads, and some that we sell a great deal cheaper.

X-*Q.* 34. I am not speaking of the different kinds you make, but take the sales as they run, of the McClain pads and of your own pads, and do you not receive more profit on the McClain pads averaging them, than on your own, averaging them?

A. As stated before, we prefer to sell our own. It would be difficult for me to make an average on the pads from memory. When a customer demands a cheap pad, we can't sell them a McClain pad. It is so with the "sectional," and other grades of pads that we make. We make sweat pads that we get more.

X-*Q.* 35. When you sell a dozen of the McClain pads, and a dozen of your own of the same grade, is not your profit greater on McClain pads, than on your own?

A. I think not. I have answered that three times, that question. To have the exact difference, I would have to go to our books; but my judgment is, that ours is the best.

A. F. RISSER.

It being now six o'clock in the evening, and Mr. Banning being unable to remain longer, and the witness being unable to return to-morrow, Mr. Banning consents to the closing of the deposition, although his cross examination is incomplete. And complainant's counsel says, that he is entirely willing, that Mr. Banning shall have opportunity to complete the cross examination to his satisfaction, within convenience of both parties, before the order allowing the complainants to take testimony, shall have expired.

Q. 1. What is your name, age, residence and occupation?

A. Allen L. Smith, I am 38 years old. I reside at 475 Cleveland Avenue Chicago, I am manager for the firm of A. F. Risser & Co., dealers in saddlery hardware.

Q. 2. How long have you been connected with the firm?

A. Twelve years.

Q. 3. How long have you been familiar with the construction of the various sweat pads for collars upon the market. If you are familier?

A. I have known of the construction of sweat pads for collars for 25 years.

Q. 4. Upon whose manufacture of sweat pads did you first see a metallic hook attached for the purpose of grasping the foreroll of the collar?

A. It was a pad manufactured by McClain & Anderson of Greenfield, Ohio.

Q. 5. State what you know, if anything, as to how successful this pad has been in its filling the popular demand?

A. Well, as far as I know, it has to a great extent pushed other pads out of the market, and we were really forced to keep them by the demand of the trade.

Q. 6. To what cause do you attribute this success? Whether of business management, good workmanship in the pads or the presence of any particular feature of construction?

A. Well, I attribute it to the peculiar feature of the hook.

Q. 7. Which was the most thoroughly advertized, in your judgment, the Benoit sectional pad manufactured by your house, or the McClain pad, if you know?

A. As far as my judgment goes, the McClain pad.

Q. 8. But, was there or not, a great deal of advertizing of the Benoit pad in order to make it the leading pad?

A. No, not at the time we controlled it. The advertizing was very limited with us.

Q. 9. When did your house take hold of the Benoit pad.

A. Well sir, I can't recall the year. I should judge it was five years ago.

Q. 10. Do you know what efforts were made to advertize that pad before you took hold of it.

A. I do not.

Q. 11. Do you still manufacture pads, sectional and others?

A. We do. We are not manufacturing any of the sectional pads at present. We have a large stock on hand, and we presume we will manufacture them as there is a demand for them.

Q. 12. How is it in this regard with the McClain pads with hooks on. Have you a stock of them on hand or have you orders for them waiting a supply?

A. We have no stock on hand at present. We have orders in the factory for them and we have a great many orders in the house waiting for pads.

Q. 13. Which do you sell at the higher price, the McClain pad or those manufactured by your house.

A. Well of the pads that we have the largest sale of our own manufacture, the McClain pad brings the highest price; but we manufacture a pad that we sell smaller quantities of that is higher priced than the McClain pad.

Q. 14. Which, according to your present recollection, if you have not made an examination, did your house sell most of last year, the McClain pads or all other pads combined?

A. As far as my recollection goes, I think we sold most of our own make of various kinds.

Q. 15. Would the balance be large, or small or doubtful, in favor of your own manufacture?

A. I should judge it was not very large. I think if we could have got McClain pads to fill our orders we would have sold more of them than of our own make.

Q. 17. How many traveling men have you got on the road?

A. Nine.

Q. 17. What is the character of instruction to them, if there be any, with reference to your own pads, giving them the preference in the sales?

A. My instructions to our traveling men is to always push the goods of our own manufacture in perference to goods we purchase.

CROSS EXAMINATION BY T. A. BANNING, ESQ.

X-*Q.* 18. Why did your house cease to manufacture and sell the sectional pad?

A. We have not ceased to sell it. We have stopped manufacturing for a short time, for the reason we have a stock, and we have never been in the habit of manufacturing the sectional pad through the whole year.

X-*Q.* 19. Was not your firm sued for the manufacture of that pad?

A. Not to my knowlege.

X-*Q.* 20. On which pads, your own or McClain's of the same grade, does your house make the greatest profit?

A. As far as I can recollect, I think the percentage of profit is about the same, taking into consideration that we have to pay freight and sacking on the McClain pad.

X.-*Q.* 21. Are there more sweat pads manufactured now than there was before the introduction of the McClain pad; or has not the business largely shifted from the harness makers to the jobbing houses.

A. Why, in my judgment the trade is much larger, that is there is more pads manufactured now than there was before, and the trade has almost entirely changed in that respect.

X-*Q.* 22. Are not the increased sales of your house the result of this change in the manufacture of sweat pads from the harness makers to the jobbers?

A. Yes sir.

X-*Q.* 23. Look at these two sweat pads before you marked "Defendant's Exhibit McClain's Present Attachment and Defendant's Exhibit Single Roll Spring," and state whether they represent the kind of McClain sweat pads which your house has been handling

A. They represent one kind. We have handled other makes of theirs. This one "McClain's Present Attachment," what we call the No. 1. We sell the No. 1, No. 2 and No. 10. As to this McClain single roll spring, I think we have sold it also. If it is the old attachment of McClain, we sold it altogether before the present attachment.

X-*Q.* 24. How does your sales of the present attachment, which you have designated as No. 1, compare with the sales of the other makes of McClain pads which you are selling and which you designated as No. 2 and No. 10?

A. Well, I should judge we sold five times of the No. 1 as we did of the No. 2 and 10 combined. They all have the same kind of spring; but the No. 2 and 10 have four springs each, while the No. 1 has but two. No. 2 and 10 being open at the top.

RE-DIRECT.

R-D. 25. In cross examination you have referred to certain changes in business that have recently occurred, transferring the pad trade to the jobbers more largely than formerly was the case. What I desire to ask in this connection is, what influence has the introduction of the hook-pad had in bringing about this change in the character of doing business?

A. In my opinion it has had a large influence; although the change had begun to take place before I knew anything about a hook sweat pad.

R-D. 26. You did not commence to handle the hook-sweat pad did you until after it had attained some considerable reputation in the trade; or what is the fact in relation to that?

A. No, we did not. It has always been our aim to push goods of our own manufacture, and we did not buy the McClain pad to sell until our demands became so great that we were forced to place it in stock.

ALLAN L. SMITH.

Q. 1. What is your name, age, residence and occupation?

A. Zachariah Squires, I am 52 years of age, I reside in Chicago, my business, saddlery hardware.

Q. 2. Please state the name of your house in Chicago, how long you have been in the saddlery business, and whether as a part of that business, you handle sweat pads for collars or make them?

A. The name of the house is Z. Squires Jr. & Co. I have been in the saddlery hardware business about 25 years. I used to be in Company with my father. Before we came to Chicago, we used to manufacture harness, collars, sweat pads and in general, saddlery hardware. Since the great fire we have been in Chicago. We have always bought and sold a great many sweat pads for collars; have manufactured but few.

Q. 3. Do you handle the pads made by E. L. McClain & Co. formerly McClain & Anderson, with the metallic grasping hooks?

A. We do.

Q. 4. How long have you handled them, and how extensively?

A. I couldn't say exactly, about three years. I think when they first came out, we didn't handle any. We handle from two to four hundred dozen a year.

Q. 5. How does this "from two to four hundred dozen a year," compare with the amount of your sales of all other collar sweat pads, taken together, which have no grasping metallic hook?

A. The sales of the McClain pad have been considerably larger.

Q. 6. Considering the time since the first introduction of the pads with the hooks, what have you to say as regards the success in the market of that, as a new manufacture?

A. We find our customers like them better than any other sweat pads we have ever handled; principally on account of the device, for attaching and detaching them to the collar. I will explain what I mean by that. It is on account, that when a great many put on and take off the collars, they slip them on over the horses head without unbuckling the collar, and with the old style of pad, it is very hard to do that without unbuckling, and with

the "Success" pad, they can detach the pad from the collar, so that the collar can be slipped on or off from the horse without unbuckling. One reason is, a good many farmers use the same collars on different horses many times, they detach the pad and use the collar without any pad. These are the principal reasons our customers have given, for liking the "Success" pad better.

Q. 7. What do you say as to whether the horse has, or has not derived benefit from the introduction of these metallic detachable hooks, from the fact, if it be a fact, that the owners of horses are thus induced, to use sweat collars more generally?

A. Well I think there are more sweat pads used, and in that way horses are benefited more.

Q. 8. How do the prices at which you sell the pads with metallic hooks, compare with prices at which you sell other pads of similar size, workmanship and material, if there be such without the metallic hook?

A. The material used is of better quality, and the pad is shaped differently, and the prices are from 25 to 33 per cent higher, that is the "Success" or McClain pad, than of the pads we formerly sold.

Q. 9. Please examine the exhibits lying before you, marked respectively McClain's exhibit "single roll spring" and McClain's "present attachment," and state, which of those modes of attaching the fastening to the collar have been used upon the McClain pads sold by you?

A. We have sold pads with both kinds of attachments.

Q. 10. Before the introduction of the mode of attachment shown in exhibit McClain "present attachment," did you ever hear any objection to the mode of attachment shown in exhibit McClain's "single roll spring?"

A. But very little.

Q. 11. Did you ever hear any?

A. Yes.

Q. 12. By whom was this objection made?

A. By customers of ours.

Q. 13. Suppose the mode shown in exhibit "McClain's present attachment" had not been introduced up to the present time, what is your opinion with reference to whether or not, the other mode of attachment shown in exhibit "McClain's single roll

spring" would have continued to be, and have attained to the success in the market, that the present one has attained?

A. Well I think we would have sold nearly as many pads; but they like the present attachment better, I don't remember of hearing any objection to the present attachment.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 14. Before selling the McClain pads, what kind did your house sell?

A. We sold the kind usually made by most of the manufacturers and harness makers, which were made of enameled cloth and ticking. usually quilted by hand.

X-*Q.* 15. How was it fastened to the collar?

A. It was fastened by stitching one edge of the pad, on to the collar where the rim joins on to the belly of the collar.

X-*Q.* 16. Did you never sell pads that were detachably connected to the collar, before selling the McClain?

A. We never sold any that were made to be detached, before selling the "Success" pads.

X-*Q.* 17. Did you ever see any?

A. I don't remember of ever seeing any before.

X-*Q.* 18. Did you not know that sweat pads, detachably connected to the collar, were manufactured and sold before you ever saw the McClain pads?

A. I don't remember of ever hearing of any, or of seeing any.

X-*Q.* 19. If detachable sweat pads were in use before the McClain pad was made, would you consider that the McClain pad was entitled to as much credit as you gave it, when you explain, that it can be detached from the collar, and the collar removed over the horse's head, etc?

Question objected to for indefiniteness, in that it does not explain the character of detachability, that it is desired the witness shall institute the comparison with.

A. It would be owing a great deal to what the device was, for detaching it from the collar.

X-*Q.* 20. In explaining as one of the advantages of the McClain pad, that it was capable of being detached from the collar, and the collar removed over the horse's head, etc., were

you not speaking under the impression, that McClain was entitled to the credit, of first making and introducing a detachable pad?

A. I was under the impression, that they were entitled to the first patent device for detaching sweat pads from collars, but my explanation was more particularly to explain the convenience and worth of the pad, to the one who was using them.

X-*Q.* 21. Does not your house derive more profit from the sale of the McClain sweat pad, than from the sale of the kind, which you handled before beginning to sell the McClain?

A. We sell more sweat pads than we used to, before we commenced to handle the "Success" pad, and we derive more profit, for the reason that we carry more stock, and sell more pads. I suppose we do receive more profit, for the reason we are not manufacturing other pads. I think if we were manufacturing the old style of pad, that our per cent of profit would have been as large as they are with the "Success" pad.

X-*Q.* 22. Has there not been a great change in the last ten years in the sweat pad business, so that now jobbers mostly supply the demand, while before harness makers were in the habit of making the pads for their customers?

A. About ten years ago, and previous to that time, most of our customers made their own sweat pads, but since that time the sale by the jobbers has increased every year.

X-*Q.* 23. Have not the jobbers now practically absorbed the business, so that most of the sweat pads which are used, are sold to the harness makers, instead of being made by them?

A. I think our customers, at the present time make more of the old style of pads themselves, than they buy of jobbers or manufacturers. That has been the case for the last ten years.

X-*Q.* 24. Did not your house, when you began to handle the McClain pads, enter into a contract with McClain, or the parties who manufactured his pads, regulating the prices, etc?

A. We did enter into a written contract.

RE-DIRECT.

R-D. 25. You have stated in your cross examination, that the business of sweat pads has undergone somewhat of a change, in that the jobbers handle them more than they did formerly.

What I desire to ask is, what influence tending to produce that change, has the introduction of Mr. McClain's sweat pad and hooks excrcised?

A. Previous to the introduction of the "Success" pad, in our trade, we used to sell a great many collars, called canvas or duck collars, and some flag collars, which were used, instead of using sweat collars on other collars. Since the introduction of the "Success" sweat pads, the demand for canvass or duck and flag collars has fallen off so, that we do not keep any in stock.

R-D. 26. Yes, but you did not get the exact point of my question, which I will state again. You had stated before that within some recent years, jobbers sold more sweat pads, than they did formerly. The question is, was it the introduction of the McClain pad, that gave this increased trade to the jobbers?

A. Previous to the introduction of the success pad, jobbers were selling more sweat pads than they had formerly, for the reason that manufacturers had facilities for producing the pads and selling them, so that the jobbers could supply many harness makers at lower prices, than they could produce them themselves; but since the "Success" pad has come in the market, our sales have been very much larger.

Z. SQUIRES, JR.

L. D. RANDALL.

Q. 1. State your name, age and residence.

A. Name, L. D. Randall, age 68, reside in City of Dubuque, State of Iowa, business: merchant and manufacturer of saddlery hardware and leather.

Q. 2. State whether you have been engaged in the manufacture and sale of sweat pads for horse collars and state how long you have been so engaged.

A. I have been engaged in the manufacture of harness for about 40 years, and more or less sweat pads during that time.

Q. 3. State if you are familiar with sweat pads with metallic grasping hooks, such as shown in respondents "Exhibit's McClain

Single Roll Spring" and "McClain's Present Attachment." How long have you been familiar with such as these, and have you dealt in them?

A. I have. I have been acquainted with them very soon after McClain & Anderson put them on the market. I have dealt in them.

Q. 4. Are you the L. D. Randall referred to in letters patent now shown you marked "Complainant's Exhibit McClain's Patent No. 3."

A. I am.

Q. 5. Prior to the grant of that patent had you sold or dealt in pads such as Exhibit "McClain Single Roll Spring."

A. I had.

Q. 6. What was the effect upon the market for similar pads, of the introduction of this metallic grasping hook upon McClain & Anderson's work, and state what was the character of success attending the efforts to introduce pads containing that hook?

A. The pad very largely took the place of cheaper pads, of former pads.

Q. 7. In respect to men dealing in pads, I want to know whether they handle this McClain hook pad as a matter of choice, or greater profit than the prior pads; or whether they were compelled by the demand of their custmers for these hooks to handle those pads.

A. It became necessary to handle them on account of the demand.

Q. 8. Did the house of L. D. Randall & Co. manufacture any metallic grasping hooks for attaching pads to collars such as shown in the before referred to patent?

A. It did.

Q. 9. Please point to the figure in the drawing of said patent for the form of grasping hooks so made by your house, and if you have any specimen of the hook such as made and used by your house, please introduce it and let it be marked "Complainant's Exhibit Scherling Hook?"

A. Figure one, in drawing of said patent, and I here offer you a hook such as we made.

Q. 10. State what degree of success your house had upon the hook such as the "Scherling Exhibit." Was there a demand, did

the demand increase or otherwise, was it, or was it not satisfactory to the users.

A. Yes, they gave very good satisfaction, there was a demand which increased during the time of our manufacture.

Q. 11. It has been suggested, Mr. Randall, that a pin of this kind to be stuck through the pad, would not be practically successful for certain reasons that have been stated. I want to know what your experience was in this regard. What if any objections were found to it in use?

A. We did not hear of any objections. It gave satisfaction so far as we know.

Q. 12. You will please state in your own way and in detail why you ceased to manufacture this hook and why you sold the patent if you did so.

A. Some time after we commenced manufacturing the hook McClain & Anderson notified us that it was an infringement on their hook. After some correspondence with them we consulted an attorney who advised us that in his opinion it was an infringement. That were our reasons.

Q. 13. As I have understood you, before McClain's pads came on the market your house manufactured pads, and you are still engaged in manufacturing those pads. State whether I am right in this, and state further how the selling prices of the pads made by yourself compare with the selling prices of McClain & Anderson's pads, having the hooks on referred to.

A. You are rightly informed. We were so manufacturing, and we are manufacturing a pad similar to what we made before, and also similar to McClain & Anderson's, but fastened to the collar with a leather strap held on by the hames. We sell these pads one dollar less per doz. than the McClain pad which we also sell.

Q. 14. In other respects than the McClain hook, state how your pads in material and workmanship that you sell at one dollar less per doz. compare with the similar McClain pads.

A. I think there is very little difference.

Q. 15. Your attention is directed to the different modes of securing the grasping hook to the pads shown in the two defendants exhibits lying before you, being respectively "McClain's Single Roll Spring" and "McClain Present Attachment," and you

are asked if there is any substantial difference in their popularity or utility.

A. I think the present attachment would be preferred.

Q. 16. What I more particularly desire to ask is, is there any substantial difference; to illustrate: while you dealt in pads having the spring attached as in the exhibit "McClain Single Roll Spring" and before the introduction to the market of the exhibit "Present Attachment" were there any objections to the former that you knew or heard of.

A. I don't think there is any substantial difference and I heard of no complaint.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 17. You have introduced a hook as a sample of those made by you under the "Scherling Patent," does the size of wire shown in this hook correspond with the size of wire you used in making those hooks?

A. No sir. The other was a lighter hook, made of lighter wire, one or two numbers lighter at least $\frac{2}{3}$ that size, perhaps $\frac{3}{4}$.

X-*Q.* 18. In selling the McClain pad, which kind did you sell, like either one of these exhibits, "McClain Single Roll Spring" or "McClain's Present Attachment?"

A. We sold the "Single Roll Spring" until the "Present Attachment" came out, and since I think we have sold the "Present Attachment."

X-*Q.* 19. Was any objection or dissatisfaction ever expressed that you know of, to the "Single Roll Spring?"

A. I don't know that there was.

X-*Q.* 20. You find a greater profit in selling McClain pads than those of your own manufacture.

A. I don't think we do. If we could make the McClain pad I think we would.

X-*Q.* 21. Has not the McClain pad been advertised and pushed on the market to an extent extraordinary as compared to other sweat pads.

A. I think it has.

X-*Q.* 22. In your opinion does not that circumstance largely account for its superceding other pads in the trade?

A. I think so, in a measure.

X-*Q.* 23. Your house and others sell the McClain pads at a fixed and uniform price, settled by contract with McClain, or those who manufacture this pad, do they not?

A. We do. I can't speak for others, but that is my understanding.

X-*Q.* 24. Were the pads which you manufactured many years ago detachable from the collar?

A. No sir-

X-*Q.* 25. How long have you made pads so they could be detached from the collar attached thereto by straps?

A. About two years. I have known of them about four or five years.

RE-DIRECT EXAMINATION BY COMPLAINANT.

R-D. 26. You have stated that in a measure the advertising of the McClain pad has contributed to its success or popularity, what I desire to ask in this connection is, has advertising any other functions than that of calling attention to the merits and demerits of the particular article advertised?

A. I don't know how to answer that. I don't know that it has any other functions.

L. D. RANDALL.

CHARLES G. SCHMIDT.

Q. 1. Please state your name, age, residence and occupation. and how long have you been so engaged?

A. My name is Charles G. Schmidt, aged fifty-four years. I reside in St. Paul, Minnesota, and my business is selling hardware and leather, and have been in that business between eighteen and nineteen years.

Q. 2. Have you ever manufactured and do you now manufacture sweat pads for horse collars?

A. Yes, sir; I have and do now.

Q. 3. How are these sweat pads attached to the collar?

A. I have some to sew in and some not to sew in?

Q. 4. Have you dealt in the McClain sweat pads, having

metallic grasping hooks attached to them? If so, when did you commence to deal in them?

A. Yes, sir; I have; and I think I commenced about seven years ago to deal in them.

Q. 5. How has that business, so far as it applies to the Mc Clain pad with the metallic grasping hook, progressed since you commenced it?

A. About 50 per cent increase since I began.

Q. 6. What do you know as to the favor or disfavor with which these pads were received by the trade and by the users?

A. They like them better on account of the spring hook, because they can take them off easier from the collar.

Q. 7. Do you mean by 50 per cent increase that you only sell one and one-half (1½) times as many per year now as you sold the first year you dealt in them?

A. The way I estimated was by once in a while looking over the bills. At that time my partner did all the buying, and I was on the road about ten months of the year travelling and selling goods, so that I don't know how many he really did buy or sell for the first one or two years; but since then I have staid at home and done the buying and selling myself.

Q. 8. About how many do you sell per year now?

A. Between five and seven hundred dozen pads.

Q. 9. What year did you buy your partner out?

A. In January, 1883.

Q. 10. About how many did you sell in 1883?

A. I don't know. I cannot tell.

Q. 11. Do you think you sold two hundred dozen?

A. Yes, sir; I sold two hundred and fifty dozen.

Q. 12. Has the increase in this trade been regular from year to year, or has it been irregular.

A. It has been regular.

Q. 13. Is there any feature of this pad other than the hook that is entitled to any of the credit for its success?

A. Not that I know of.

Q. 14. Is there any advantage to the horse in the use of a pad that is easily detachable from the collar? If there is, what is it?

A. I do not know that there is any, if I understand you right?

Q. 15. Is there any advantage to a horse in having the pad so attached to the collar that it can be removed and dried?

A. Yes, sir.

Q. 16. What is that advantage?

A. Instead of sewing the collar in, when they are attached with a hook and the horse sweats you can take it off at night and dry it, and have it all nice and dry in the morning.

Q. 17. Is this a trifling advantage, or is it one of very great benefit?

A. It is a great advantage when a horse sweats or it rains.

Q. 18. The sweat pads that you made and make now, how are they attached to the collar?

A. Some—one kind I sew in, the other kind are closed at the top and the bottom, and are slid over the horses head and the collar is placed over it, and nothing is used to connect or attach them together.

Q. 19. In the use of the latter kind of pads you have to have a separate pad for each horse?

A. Yes, very near to it, though it does not make any difference for half an inch.

Q. 20. Have you had any experience in the manufacture or sale of pads secured to the collar by strap or strap and buckle?

A. I have not that I know of.

Q. 21. About what is the relative selling price of the McClain pad and of the two kinds of pads made by yourself?

A. Those I sew in I sell for $4.00 per dozen, and those I slip over the head I sell for $6.00. The McClain pad I sell for $6.50.

Q. 22. Without reference to the metallic grasping hook, which is the best pad so far as labor and material are concerned? Your pad that you slip over the horse's head, or the McClain pad?

A. The cloth is about the same; but the inside stuff of mine is the better.

Q. 23. About how many per year do you sell of your own pads that slip over the horse's head?

A. About one hundred dozen, I think. Perhaps a little over one hundred dozen.

Q. 24. How do you account for the fact, that your pad, that slips over the horse's head, and which is a better pad than the

McClain's, as you say, does not sell as well or better than the McClain pad?

A. On account of that hook. It stays better to the collar.

Q. 25. Then you have not known prior to the McClain pad, any pad, that could be held in a comfortable position on the collar, and was at the same time easily removeable from the collar, for the purpose of drying, have you?

A. I think I have.

Q. 26. Describe them.

A. There is a pad I manufactured in Stillwater, a year and one half ago, with a wire attachment, and at the same time hold the hame to the collar, but this is subsequent to the McClain pad. These were made under the patent of B. F. Rice of 1884 or 1885.

Q. 27. I will repeat the question No. 25 to you and the officer will read it to you. (Int. 25 read.)

A. No sir.

Q. 28. You have answered with reference to the effect on your own business of the introduction of the McClain pad. Can you state what its effect has been upon the trade of pads generally.

A. I don't think I could.

Q. 29. Are you familiar with both methods of attaching the hook to the pad, shown respectively in Exhibit "McClain Single Roll Spring" and McClain's Present Attachment?

A. Yes.

Q. 30. Is there any substantial difference between those modes of attachment.

A. I think there is.

Q. 31. During the time that you handled pads like Exhibit "Single Roll Spring" was there any objection to them?

A. There was. The rivets always tore of the cloth.

Q. 32. Was there any other objection to them.

A. No, that was all.

Q. 33. How often have you known in your experience with them of the rivets tearing off the cloth?

A. At that time I was traveling on the road myself and heard them very often.

CROSS EXAMINATION BY MR. BANNING.

X-*Q.* 34. Are you selling the McClain pads as his agent under a contract with him?

A. I have signed a contract with him, I don't know whether it is an agency or not, to sell the pads at a certain price.

X-*Q.* 35. Before you ever saw the McClain sweat pads, had you ever made any yourself, which were attached to the collar with straps and buckles?

A. I had not.

X-*Q.* 36. Had you ever seen any of that kind before Mc Clain's?

A. Yes sir.

X-*Q.* 37. Those that were made to be fastened into the collar with a strap and buckle, could readily be taken off and dried, could they not?

A. Yes sir, by unbuckling it.

RE-DIRECT EXAMINATION.

R-D. 38. You are familiar with the amount of advertising that McClain has done, and also with the amount of advertising done by others in the trade, I presume. If you are, just state whether McClain's advertising has been of an extraordinary character or amount in reference to others?

A. I do not know. I did not keep track of any of them.

CHAS. G. SCHMIDT.

JAMES E. MOREHOUS.

Q. 1. State your name, age, residence, business and the house with which you are connected.

A. James E. Morehous, aged 46 years, residence St. Paul, Minnesota, manager in saddlery department of P. R. L. Hardenburg & Co.

Q. 2. Does that house manufacture and deal in sweat pads for horse collars. How long has it so manufactured, what kind has

it manufactured, what kinds has it dealt in, other than its own manufacture?

A. Yes sir, we do manufacture and deal in sweat pads. It has manufactured pads between five and six years. It has made the ordinary kinds, and has dealt in various patent pads.

Q. 3. Upon whose manufacture of sweat pads did you first see a metallic grasping hook for detachabiy connecting the pad to the collar?

A. As it comes to me now, it was the McClain & Anderson.

Q. 4. State if you know what degree of success has followed the effort to introduce the McClain pad with grasping hooks?

A. They have become popular.

Q. 5. When did your house commence to deal in the McClain grasping hook pad?

A. I think it was in 1883 when we began with it.

Q. 6. Give us some idea as to the rate of increase in the demand for and your sales of it from the time you commenced to handle it until now?

A. It has been a steady increase. I should say that in 1884 we sold double the pads we did in 1883, and in the following years the rate of increase has been fifty per cent.

Q. 7., That is, if I understand you correctly, that your sales for 1885 were fifty per cent larger than for 1884, and your sales for 1886 about fifty per cent larger than for 1885. Is this the general statement you desire to make?

A. As far as 1885 is compared with 1884, I think it correct. But 1886 compared with 1885, I should think about twenty-five per cent more increase.

Q. 8. Of the whole number of pads sold by your house, about what percentage of them are the McClain grasping hook pads now?

A. I should say about fifty per cent, maybe more.

Q. 9. What, if any, effect upon the trade—that is, upon the character of persons who made and sold pads—did the introduction of the McClain grasping hook pad have?

A. It has not changed the character of the trade, except to have them purchase pads instead of manufacturing them, so far as it relates to the harness manufacture.

Q. 10. Has the change in this character been very great?

A. The introduction of the McClain patent pad has made a

decrease in the manufacture of pads by the harness makers of this section.

Q. 11. Was this because of the demand for the McClain grasping hook pad; and if not, what was the cause?

A. Partially on account of the demand for the McClain grasping device and the desire or pre-disposition to buy instead of manufacture.

Q. 12. The pads of which you sell a majority, other than the McClain pads, how do their selling prices compare with the McClain pad?

A. Of the patent pads about the same. On the common pads they have made no change and had no effect on price. The common pads are lower.

Q. 13. What do you mean by patent pads other than the McClain pad?

A. Sweat pads of other manufacture. One we deal in is the "New Era." We have had others offered to us that we don't handle, the prices of which were the same as the McClain pad.

Q. 14. Has the "New Era" been introduced subsequently to the McClain pad?

A. Yes, sir; we manufacture it ourselves.

Q. 15. What is the patent feature about it?

A. A leather strap passing under the hame.

Q. 16. Did you deal in McClain pads having hooks such as shown in the exhibit before you, marked "McClain's Single Roll Spring," prior to the introduction of the hinged spring called "Present Attachment" by McClain?

A. Yes, sir.

Q. 17. I want your opinion upon the assumption that the mode of attachment of the spring to the pad, shown in exhibit "Present Attachment," had not been devised or introduced, would the first mode, or "Single Roll Spring," have remained popular, and acquired the popularity that the McClain pad has?

A. I should say that it would.

Q. 18. What would you say was the proportion of all the pads made in the country of the McClain grasping hook pad?

A. I can only judge of our own section. So far as it applies to this section I should say it was fifty per cent of the pads sold; possibly more.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 19. Prior to the introduction of the McClain pads had your house made and sold a detachable sweat pad?

A. Yes, sir.

X-Q. 20. How was it attached to the collar?

A. Some were sewed in; others with a strap holding it to the collar; others allowed loose on the horses neck.

X-Q. 21. Are you still making pads detachably connected to the collar by means of straps?

A. Yes, sir.

X-Q. 22. Are you not sellling the McClain pads as their agents under a contract with them?

Yes, sir.

X-Q. 23. Are you not making a greater profit on the sale of the McClain pads than on the sale of your own?

A. About the same.

X-Q. 24. Have not the McClain pads been advertised and pushed on the market by their manufacturers to an extraordinary extent as compared with other sweat pads?

A. Yes, the preponderence of advertising is on the part of the McClain pad, so far as my observation enables me to judge.

X-Q. 25. In your opinion, does not the popularity and the demand for the McClain pads in the trade largely depend on the manner in which they have been advertised and pushed?

A. In the early introduction of the McClain pad to the trade I would answer yes. At the present their use has become a custom.

X-Q. 26. Before the introduction of the McClain pads had not the trade in sweat pads largely passed into the hands of jobbing houses like your own, and away from the harness makers, who had previously been accustomed to make pads for their customers?

A. To some extent it had.

X-Q. 27. And that change in the trade has gone on since the introduction of the McClain pad, until now harness makers generally buy their pads instead of making them for their customers. Is this not so, so far as your observation will enable you to speak?

A. I would say yes, as to the word generally.

X-Q. 28. While you were selling the McClain Single Roll Spring and before you began to be supplied with the McClain "Present Attachment" as illustrated by the exhibits before you, did you ever hear any objections to the Single Roll Spring from your customers and others?

A. I don't recollect any.

RE-DIRECT EXAMINATION.

Q. 29. About how extensive a dealer is your house in these McClain pads. State about the number you sold of them during 1883, and about the number you sold in 1886?

A. I think we began in the latter part of 1883 to sell the McClain pad. I think in 1883 we sold in the neighborhood of sixty or seventy dozen. For the year 1886 I think it was about nine hundred dozen, if my memory serves me right.

Q. 30. But can you give me an estimate in the same way of the number you sold during the first whole year that you dealt in them?

A. Taking from August, 1883, to August, 1884, I should think it would be in the neighborhood of four or five hundred dozen.

Q. 31. You stated in direct examination that the introduction of the McClain pad was the cause of the harness makers ceasing to manufacture their own pads, thus throwing the trade mainly into the hands of jobbers. But on cross-examination you further stated in substance that this movement of the trade into the hands of the jobbers had commenced prior to the introduction of the McClain pad, and has continued gradually changing in that direction to the present time. What I desire to ask you is, did you mean by these statements while under cross-examination, or do you mean now, to state that it was not the introduction of the McClain pad that was the real cause of the harness makers ceasing to make their own pads?

A. As I recollect my direct examination, I stated that the introduction of the McClain pad had caused the purchase of sweat pads by the harness makers, and their disposition to purchase said pads had lessened their manufacture of sweat pads by the harness makers. The increase of sales by us, as jobbers and manufacturers,

had increased on account of our section of the country having an increased demand from emigration. I should say that I think it was the introduction of the McClain pads that has made the change.

Q. 32. You have stated in cross-examination that Mr. Mc Clain has advertised rather more than other manufacturers of sweat pads. What I would ask you in this connection is, has the amount of his advertising been extraordinary or remarkable as compared with the manufacture of other articles that fall within your trade?

A. I should say not.

Q. 33. What would you say as to whether the character of the McClain sweat pad with grasping hook attached did or did not justify a larger amount of advertising than any other sweat pad then known, as well from the merits of the hook as its novelty to the trade?

A. I should say it did.

Q. 34. Isn't the demand for this pad such that jobbers are compelled, if they desire to sell pads, to keep the McClain pad?

A. So far as relates to the McClain pad: not as to others.

Q. 35. What I mean is, if they desire to compete with other jobbing houses, must they not keep the McClain pad?

A. If they wish to sell or fill orders for the McClain sweat pad they must have the pads.

Q. 36. Suppose that you should now omit to keep the Mc Clain pad, would not you lose fifty per cent of your trade in pads, or thereabouts?

A. I should say yes, unless we could find a substitute.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 37. Would not this loss in trade result principally from the fact, that parties have become accustomed to calling for the McClain pads?

A. I think so.

X-*Q.* 38. Do you know of any other pad, which the jobbers throughout the country have agreed to sell at certain prices, as they have the McClain pad?

A. I don't recall any.

JAMES E. MOREHOUS.

Q. 1. State your name, age, residence and business, and the name of the firm, with which you are connected?

A. Charles Friend, Jr., age, 30; residence, St. Paul, State of Minnesota, business, harness and saddlery; firm, Charles Friend.

Q. 2. Does that house deal in sweat pads for collars, and do they manufacture sweat pads?

A. They deal in them and manufacture them.

Q. 3. Does that house deal in the pads having metallic grasping hooks attached to them, manufactured by E. L. McClain & Co., formerly McClain & Anderson?

A. We do.

Q. 4. How long have you been dealing in these McClain pads, and state further, about how rapidly the demand for them has increased, since you commenced to handle them?

A. To the best of my recollection, we have been selling them since the summer of 1884. The demand for these pads has been constantly increasing, and to the best of my knowledge the per cent of increase has been about 33⅓ per cent annually.

Q. 5. What effect has the introduction of the McClain pad with the attaching hooks had upon your trade, in your manufacture of pads?

A. It has reduced the demand and sale of our own make, or the old style of sweat pads, and we are selling instead, principally this so called "Success" pad, or a pad of similar design.

Q. 6. When you say pad of similar design, do you mean that you have sold any pads with metallic attaching hooks, other than those purchased from McClain & Anderson, or E. L. McClain manufacturing Co.?

A. We have sold some pads similar to the McClain pad, called the "Victory pad" manufactured by B. F. Rice & Co., of Stillwater, Minnesota. But a very limited quantity, and a majority of said victory pads, were bought in the summer months of 1886, when it was impossible to get the McClain pad, and having demand from our trade for a pad of that style, sold said victory for a substitute.

Q. 7. Do you know whether this victory pad gave satisfaction to your customers, or otherwise?

A. I judge it has, from the fact that we have heard no complaint from the ones sold.

Q. 8. On whose manufacture of pads, did you first see a metallic grasping hook?

A. On the McClain & Anderson pad, known and called the "Success" pad.

Q. 9. About what is the ratio of profit derived by you from selling the McClain pad, as compared with the pads of your own own manufacture, per dozen?

A. The ratio of the profit is about the same, on each.

Q. 10. Which sells at the highest price, the McClain or your own manufacture of a similar grade, and about what is the difference between them?

A. The price of the McClain pad, is higher than one of our own manufacture- The difference in our wholesale price, is from $1.50 to $2.00 per dozen.

Q. 11. What has been the character of success, that this metallic hook pad has attained in the trade generally, if you know? Give us some idea of its extent?

A. In my opinion the trade, as a rule on pads, has demanded a sweat pad with an attachment of this sort, and I presume that has been caused by the fact that it is an improvement on the old sweat collars. I consider it a great success in the sweat pad business.

Q. 12. To what do you attribute this great success, to the character of manufacture, labor and material in the pad, or to the hook for detaching or grasping the collar, or to the way in which the pad has been advertised? And to what do the trade generally attribute this success, if you know?

A. My opinion of the so called success of this pad, I should judge, was due some to the cause of its being well advertised and introduced. Furthermore on the practicability of the article, and to a certain extent for the profit there is in selling this pad.

Q. 13. How much of this success is due to what you call the practicability of the thing, by which I assume you mean the metallic grasping hook?

A. I can not state definitely the proportion of the so called benefit, derived from the use of this hook.

Q. 14. How long were these McClain pads on the market, before your house commenced to handle them?

A. To the best of my knowledge, the house has handled the McClain pad very shortly after its introduction to the trade, or at least shortly after they were introduced to our notice.

Q. 15. There was as much profit in selling the old style pad, was there not, as in selling the McClain pad?

A. No sir, there was not.

Q. 16. Do you mean there was not as much per dozen upon the pads sold, or do you mean the largely increased sales of the McClain pad make a larger aggregate profit?

A. I mean that the profits per dozen were less on the old style of sweat pad, than on the McClain pad.

Q. 17. I will now call your attention to Q. 9 and answer, which the officer will read to you, and I now direct your attention to it, that it and your last answer are not consistent, and ask you which is right.

A. Both right. When I state "about the same" it might mean very nearly the same, and yet might mean more or less. I mean by that, that it is about the same, and yet there may be a little difference.

Q. 18. I will ask you, whether or not the real reason for your dealing in the McClain pad, is not the fact, that the demand compelled you to handle them?

A. I could not say positively.

Q. 19. Well can you state whether or not, you had a considerable demand for it, before you ordered any.

A. The demand for the pad was not very great before we ordered them, but kept increasing after we had them, and sold and introduced them.

CROSS EXAMINATION BY MR. BANNING.

X-*Q.* 20. Does not your house sell the McClain pads under an agreement, by which you act as one of his agents?

A. Yes sir.

X-*Q.* 21. Does not McClain advertise his sweat pads, and push them in the trade to an extraordinary extent?

A. They are advertised to a great extent?

X-*Q.* 22. Did you, before selling the McClain pad, advertise your pads anything like as extensively, as the McClain pads are advertised.

A. No sir, we never advertise our own pads.

X-*Q.* 23. Did you know of any pads that were advertised anything like as extensively, as McClain has advertised his?

A. I do not know of any being advertised as much as the McClain, although at present I believe and know similar pads to be advertised to a certain extent.

X-*Q.* 24. I believe you have said, that you largely attributed the success of the McClain pad to the effective and vigorous manner in which they have been advertised and pushed upon the market, is this correct?

A. I consider it so to a certain extent, as stated before.

X-*Q.* 25. Were the pads which you made and sold, before selling the McClain pads, detachable from the collar?

A. They were not. The pads manufactured by us, and sold previously to the introduction of the McClain, were sewed to the collar and could not be detached, unless they were cut out or wore out.

X-*Q.* 26. Did you ever see any or know of any, that were detachable before the McClain?

A. We have used a pad that was attached to the collar by means of a strap and buckle, which were not sewed to the collar. I am not certain whether that was before the McClain or not. I believe it was before.

CHARLES FRIEND, JR.

EDWARD A. KONANTZ.

Q. 1. State your name, age, residence and business, and the name of the house, with which you are connected?

A. Edward A. Konantz, age, 29; residence, St Paul, house I represent, W. H. Konantz & Brothers, wholesale saddlery, harness, etc.

Q. 2. If your house deals in sweat pads for horse collars, state how long it has been dealing in them?

A. It has been dealing in sweat collars since it has been in the business, about 14 years.

Q. 3. If you handle the McClain pad having the metallic grasping hooks attached, state when you first commenced to handle them?

A. We started to handle them about four years ago, I think.

Q. 4. Upon whose manufacture of sweat pads did you first see the metallic grasping hook, for detachably connecting the collar?

A. Upon the McClain.

Q. 5. Please state about, with what degree of popular favor this pad was received by the public, when it was first introduced, so far as you know?

A. As far as I know the public looked upon it as an advantage inasmuch as it could be detached from the collar, an advantage over the old style of pad.

Q. 6. Has the demand for it increased, and about at what ratio?

A. The demand with us has increased about one hundred per cent, per year.

Q. 7. And this I understand you, is all attributable to the presence on these pads of the metallic grasping hooks?

A. Well, I can't say that the increase is caused by the use of the metallic hook alone, inasmuch as a great many of the trade have got into the way of buying, instead of manufacturing, as they formerly did.

Q. 8. What proportion of this increase, do you attribute to the use of these metallic hooks?

A. Indirectly I think it is the cause of our increase throughout, it has been the means of their purchasing these pads, while otherwise they would manufacture the old style of pad.

Q. 9. That is, if I understand you correctly, the cessation by the harness-makers of making the old style of pad, thereby throwing the trade mainly into the hands of jobbers, is owing to the fact that such pads as the harness makers had made, and had a right to make, would not compete in the market with the pad having metallic grasping hooks on? Do I understand you correctly?

A. Yes sir.

Q. 10. How were the pads attached to the collars, that you dealt in, prior to the introduction of the McClain pad?

A. They were sewed to the collar, and some few that we sold, fastened by straps to the collar.

Q. 11. What was your observation at the time the McClain pads were introduced, and since that time as to whether the mode of attachment by straps, or strap and buckle, if you knew of that mode, presented any obstacle to the introduction of the grasping hook pad, or whether those strap pads presented any competition to the grasping hook pads?

A. I think the grasping hook pad was looked upon as an improvement on the strap pad, and consequently the trade and the consumer demanded them.

Q. 12. Are there any pads made now, so far as you know, with strap or strap and buckle device for attachment to the collar?

A. Yes sir.

Q. 13. About how many? How would the number now made, compare either with the number of them made before the introduction of the McClain pad, or with the number of the McClain pad now sold?

A. I think but a very small proportion of the strap pads are used now.

Q. 14. The fact is. the strap pad never was made generally, and but very few of them are now sold anywhere, is that the fact or not?

A. I think it is.

Q. 15. How did the price, at which you sold pads of nearly similar material and construction having the strap fastening, compare with the price of the McClain pad, at the time of the introduction of the McClain pad and how do they now compare, if you know?

A. At that time, we sold them fifty cents per dozen less than the McClain pad, and at the present time I can't say much about the price, inasmuch as I don't handle them.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 16. Does not your house sell the McClain pads, as one of his agents under a contract?

A. We do.

X-*Q.* 17. You say that the harness makers throughout the country, have ceased wholly or in a large part, to make sweat pads for their customers, so that the dealing in sweat pads has passed wholly or in large part to the jobbing houses. When did this change in the trade take place, before or after the introduction of the McClain pads?

A. I can not say. Inasmuch I have been jobbing but two years, and the McClain pads were introduced, before I was doing any jobbing trade.

X-*Q.* 18. Which kind of pad, the McClain or the old style, did you find the most profitable to deal in?

A. The McClain.

X-*Q.* 19. Did you ever know any sweat pads to be advertised and pushed in the trade with anything like the vigor and extensiveness, that has been used with reference to the McClain pads?

A. I did not.

X-*Q.* 20. Does not this fact in your opinion, largely account for the popularity and success that has attended the introduction and sale of the McClain pads?

A. I think it has a great deal to do with it, but the merits of the pads have helped considerable.

X-*Q.* 21. What do you refer to when you speak of the merits of the pads?

A. The grasping hook.

X-*Q.* 22. In what respect is the grasping hook an advantage over the strap?

A. It is much easier to adjust and take off, than the strap pad.

X-*Q.* 23. Does it make the pad wear longer or fit easier on on the horse?

A. I don't think it does.

X-*Q.* 24. Look at the two pads on the floor before you marked "McClain Single Roll Spring" and "McClain Present Attachment," and state which one of these you have been selling?

A. The "Present Attachment." Before that we sold the other one.

X-*Q.* 25. Did you ever hear any objections to the single roll spring?

A. I did; a number of them.

X-*Q.* 26. State the objections and causes of dissatisfaction with the single roll spring which you heard while selling it?

A. They pulled away from the pad.

X-*Q.* 27. Were those objections the ones your customers made to them after using them?

A. Yes, sir.

RE-DIRECT EXAMINATION.

Q. 28. Are you sure that you heard the objection just spoken of prior to the time you got familiar with the other or "present attachment?"

A. I can't say positively whether it was prior to the introduction of this new attachment. Have heard it complained of often since.

Q. 29. Have you any doubt but what the pad shown as "McClain Singln Roll Spring" would have gone on and attained the same popularity that has been attained if the mode of securing the hook to the pad shown on "McClain Present Attachment" had not been devised or introduced?

A. I have.

Q. 30. Well, how much doubt have you upon that?

A. From the number that have spoken to me and have found objection to the other since this has been introduced, I should judge any hook made somewhat different so as not to pull from the pad, would have taken its place.

Q. 31. But you have lost the point of the question which is, that suppose that the mode of attachment shown in the exhibit "present attachment" had not been devised or introduced: in that case would not the spring hook attached in the exhibit "Mc Clain single roll spring" have gone on and acquired the popularity that this pad has acquired?

A. I think it would.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 32. Do you mean by your last answer to withdraw wholly or partly all that you have previously said about the objection that has existed about the McClain single roll spring?

A. I do not.

EDWARD H. KONANTZ.

Q. 1. State your name, age, residence, occupation, and the name of the house with which you are connected.

A. My name is Elmer E. Fisher, aged 24 years, residence, Minneapolis Minnesota, wholesale saddlery and hardware and am connected in business with the firm of Dodson, Fisher & Brockman.

Q. 2. Is your house engaged in the sale of sweat pads for horse collars? If so, whose manufacture do you handle?

A We are engaged in selling sweat pads for horse collars, and handle those manufactured by the E. L. McClain Manufacturing Company and also those made by A. F. Risser & Co. of Chicago, Illinois.

Q. 3. State if you have sold any other manufacture of sweat pads, if so, whose?

A. Yes, A. Ortmayer & Son's, Chicago Illinois.

Q. 4. The Ortmayer pad, has a metallic grasping hook similar to the McClain grasping hook, except that it is made of wire, has it not?

A. It has.

Q. 5. What pad is there the largest demand for, in the trade so far as your observation has gone?

A. The McClain pad with the grasping hooks on.

Q. 6. State as nearly as you can or in approximate figures how rapidly the demand for the McClain grasping hook pad has increased with you since your house has been handling them.

A. From the first year to the present time as near as I can estimate it, the increase has been about one hundred per cent.

Q. 7. In answer to your request your book-keeper gave you in round numbers from your books the amount of your sales of McClain pads with grasping hooks for the several years 1883, '84, '85, and '86, if you believe this statement from your books to be correct, will you please state the figures given you by him?

A. The amount of these goods purchased in 1883 was $125 worth, in 1884—$4,880 worth, in 1885—$7,225 worth and in 1886—10,900 worth. I believe these figures to be correct.

Q. 8. Have all these pads been sold.

A. We had on hand the first day of January, 1887 of those pads about 165 dozen, amounting to the sum of $773.

Q. 9. Were all of the McClain pads referred to in the foregoing figures supplied with the metallic grasping hooks? If not, state what proportion of them were not so supplied.

A. During the time we have bought the McClain pads, we have bought about $1,842 worth of common pads without grasping hooks. The first year, did not buy any of the common pads, since that time the above quantity has been bought.

Q. 10. Have you a distinct recollection of the way in which the hooks were attached to the pads at first? And also of the present attachment by hinge?

A. I have.

Q. 11. Calling the spring as first attached "McClain's Single Roll Spring" and the hinge attachment the "present attachment," I would ask you whether there is any substantial difference in the value or utility of those modes of attaching the spring to the pad?

A. I think there is.

Q. 12. If the single roll spring had any defect or was objectionable as compared with the other, state what the objection was and what it amounted to in practice.

A. The objection to the "single roll spring" was that it was riveted firmly to the pad. This was objectionable, because it would not give the spring a chance to play, that is, it could not move with the motion of the collar, consequently it was apt to break off. The "present attachment" having a chance to work up and down with the collar and not so apt to break.

Q. 13. It is the liability to breakage then that was the only objection to the "single roll spring" so far as you know. Is that right?

A. That was the only objection so far as I know.

Q. 14. In a thousand such "single roll springs," how many of them broke upon an average?

A. I think about one dozen in a thousand.

Q. 15. If the hinge attachment had not been devised or introduced; in your opinion from the opportunities you had for observation, would the McClain pad with the single roll spring have maintained its then popularity, and attained the popularity of the present "Success" pad?

A. I think it would have done so.

Q. 16. You have stated that your house sold two other kinds of pads during the time referred to since you have been selling the Mc Clain pad. About what proportion did the sales of these two combined, bear to the amount of your sales of the McClain pads?

A. We sold about one dozen of the two combined to twenty-five dozen of the McClain.

Q. 17. To what do you attribute the popularity of the Mc Clain pad.

A. The spring hooks.

Q. 18. In your judgment could any house at present do a large business in sweat pads that did not handle a pad having metallic grasping hook attached.

A. I think not.

CROSS EXAMININATION BY MR. BANNING.

X-*Q.* 19. Is not your house acting as an agent for the sale of the McClain pads under a contract with him?

A. Yes sir.

X-*Q.* 20. You have attributed the popularity of the McClain pad to the hooks. Do you exclude, as elements which have contributed to the sale of these pads, Mr. McClain's extensive advertising, business management and other similar matters, or would you say that these considerations have entered largely into the matter.

A. I think the advertising has helped the sale a great deal, of the McClain pad.

X-*Q.* 21. Has there been any other pad in the country so far as your knowledge extends which has been advertised or pushed on the market to anything like the extent to which the McClain pad has been advertised and pushed?

A. So far as I know. I think not.

X-*Q.* 22. Is there not a greater profit to your house from the sale of the McClain pads than from the sale of any others you have handled, taking them by dozens or hundreds.

A. We have made a larger profit on the McClain pad in the past, than on any other pad we have handled by the dozen or hundred.

X-*Q.* 23. How many men do you have selling goods on the road?

A. Three at the present. Up to January 1st last we had part of the time four men.

X.-Q. 24. How long since you first saw a sweat pad?

A. We have been selling them three years about.

RE-EXAMINATION BY MR. MOORE.

Q. 25. Do you know of any use in advertising other than to draw people's attention to the merits and demerits of the thing advertised?

A. None, unless it is the low price of the article advertised.

Q. 26. How many catalogues per annum are issued by your house and by other houses in the same business, if you know.

A. From two to three per annum.

Q. 27. Do you know how many McClain issues, if so state.

A. No, I do not.

Q. 28. Would any amount of advertising, however large, have given to any pad not having metallic grasping hooks the popularity that has been attained by the "Success" pad in your judgment?

A. In my judgment, no.

RE-CROSS EXAMINATION BY MR. BANNING.

X-*Q.* 29. In your last answer do you refer among other pads to those detachably connected by means of straps when you say that in your judgment no amount of advertising could have introduced them like the McClain pads have been introduced.

A. As I understand your question it is, if they advertised a pad connected by straps would it be as popular as the McClain pad. If I understand you correctly, I think such a pad could be introduced as well, but would not have the demand or popularity of the metallic hook pad.

X-*Q.* 30. Would not such a pad be as comfortable and useful on the horse, be adapted to different horses and possess all of the intrinsic merits that you can call to mind in the McClain pads.

A. I think it would, but not so convenient and handy to put on and take off the collar. As far as the usefulness of it is concerned, it would answer the same purpose for the horse, and I think it would last as long.

ELMER E. FISHER.

Q. 1. State your name, age, residence, business and with what house you are connected.

A. My name is William H. Brockmann, am 24 years old, reside in Minneapolis, Minnesota, am in the wholesale saddlery and hardware business as a member of the firm of Dodson, Fisher & Brockmann.

Q. 2. Have you been present during the examination of Elmer E. Fisher, or have you read such parts of his testimony as you did not hear?

A. Yes sir.

Q. 3. With reference to the whole of that deposition statements of opinion as well as of fact, if there be any part of it that you do not agree with Mr. Fisher in, state what such part is.

A. I agree with Mr. Fisher throughout.

Q. 4. What experience have you had if any as a travelling agent for the house, and as such agent did you sell pads, and hear the different criticisms or eulogies founded upon these different pads by the trade?

A. I have travelled for the house two years and have sold pads for it and have heard some talk abont the different pads.

Q. 5. What is the most popular pad in the United States so far as you know?

A. The "Success" pad made by McClain.

Q. 6. To what is the popularity attributable?

A. To the metallic hook fastening.

Q. 7. Did you ever hear any objection on the road or otherwise to "McClain's Single Roll Spring" before the introduction of "McClain's Present Attachment?

A. No sir. No more than what people will object; there are always some fault finders to everything.

Q. 8. You mean by that, do you not, that the only objection was cavilling.

A. Yes sir.

Q. 9. It has been stated, as you have observed, by Mr. Fisher that some of the metallic hooks when riveted on, as in McClain's Single Roll Spring, broke. I would ask you first to state about what proportion of them broke, and second, I would ask you whether or not some of the "Present Attachment" do not also break.

A. About one in a hundred broke as far as I know. In the "Present Attachment" the hooks do not break, but the rivets pull out in about the same proportion as the breakage of the "Single Roll Spring."

CROSS EXAMINATION BY MR. BANNING.

X-*Q.* 10. Did you ever know of the rivets pulling out as you have suggested in your last answer?

A. I know of it only from what I have been told by the trade.

WILLIAM H. BROCKMANN.

W. E. HOFFMANN.

Q. 1. State your name, age, residence, occupation and with what house you are connected?

A. My name, W. E. Hoffmann, my age, 25 years, occupation, saddlery and hardware, Des Moines, I am the president and treasurer of the Des Moines Saddlery and Hardware Manufacturing Company.

Q. 2. Does that house deal in sweat pads for horse collars, and how long has it dealt in them?

A. It does, and has dealt in them for six years.

Q 3. Did that house ever manufacture sweat pads and do they yet.

A. We did, but do not now.

Q. 4. When did you cease manufacturing sweat pads, and why?

A. We ceased two years ago, the reason: why we could not manufacture them as cheap as we could buy them.

Q. 5. Did you manufacture what was known as cheap sweat pads about two to four dollars a dozen?

A. We did.

Q. 6. And was it because you can have them made by others cheaper now that you ceased to manufacture such pads?

A. No.

Q. 7. Do you deal in the McClain pad having metallic grasping hooks, and how long have you been dealing in them?

A. We do. Four years.

Q. 8. Has the demand for those pads increased since you commenced to deal in them and at about what rate?

A. They have, about fifty per cent increase.

Q. 9. Does your answer mean fifty per cent for the whole period of time or per annum?

A. It means per annum.

Q. 10. Can you state approximately the number of these Mc Clain pads that you sold during the years 1884, 1885, 1886 and the number that you expect from present appearances to sell during 1887?

A. In 1884 we sold two hundred dozen pairs. In 1885, five hundred dozen. In 1886, six hundred and fifty dozen, and we expect to sell a thousand dozen pairs in 1887.

Q. 11. Has there been any change that you have observed with relation to the class of dealers who handle sweat pads, if so state what it is?

A. There has been a change, the change is the buying of a better grade of sweat pads.

Q. 12. More particularly what I mean is, whether the harness makers have wholly or in great measure ceased to manufacture sweat pads and purchase their supply from jobbers?

A. They have in great measure.

Q. 13. To what do you attribute this change in the market?

A. I attribute this change that the farmers are demanding a larger sweat pad, and one that is easy adjustable. I mean by adjustable, putting on and taking off.

Q. 14. What if any device have you reference to as enabling this easy adjustment to be made?

A. It is on a sweat pad manufactured by McClain Manufacturing Company, known as the "Success pad," the adjustable part used on this pad is the hook.

Q. 15. Is the demand for this McClain pad with the metallic grasping hooks an ordinary increase within your observation of other articles in your trade, or is it a very great demand, please state how this demand strikes people generally in your trade?

A. It is a very great demand, it strikes them very favorable.

Q. 16. Has this demand or not, revolutionized the market for pads?

A. It has.

Q. 17. To what feature of this Pad is this remarkable success to be attributed?

A. It is attributed to the hook used on the pad.

Q. 18. Suppose that you or any other dealer should cease selling this McClain pad, do you think you would loose your trade in large measure, or is there any other pad in the market without this metallic grasping hook that would supply your trade?

A. We would loose a very large part of our trade, there is no other pad in the market to take the place of it.

Q. 19. Is there any pad heretofore manufactured by you and still sold to which these grasping hooks are applied, and state the name of that pad?

A. The Des Moines pad is the pad referred to.

Q. 20. If some of these pads are secured to the collar in a different manner, and are without the grasping hooks, please describe how they are secured to the collar?

A. They are secured to the collar with straps and buckles.

Q. 21. Please state the prices at which you sell these pads supplied with straps and buckles, and also the price at which you sell them with the McClain grasping hook?

A. The pad with the straps and buckles are sold at six dollars per dozen pairs, the same pad with McClain's fasteners are sold at six dollars and a half per dozen pairs.

Q. 22. Is there any difference in these Des Moines pads other than the difference between the strap and buckle and the grasping hook?

A. No.

Q. 23. Will you please state, what if any advantage there is in the use of the hook as compared with the strap and buckle?

A. The advantage of the hook is keeping the sweat pad in place, and especially the sweat pad moving around on the collar.

Q. 24. As I understand you, you mean that when the strap and buckle are used inasmuch as the strap passes around the collar, there is nothing to keep the pad compactly to the collar during the different movements of the horse, and that in going down hill the pad is liable to slip in front of the collar while in

going up hill the pad is likely to slip to the rear of the collar, if I am not right about this, please explain where I am wrong?

Objected by defendant's counsel as being leading suggestive and argumentative, and not warranted by the answers of the witness.

Question withdrawn.

Q. 25. Will you please state a little more in detail what you mean by the language of answer 23 to-wit: "The advantage of the hook is keeping the sweat pad in place"?

A. The hook keeps the pad in place as the horse goes down the hill, and as the horse goes up the hill it keeps the pad from falling back.

Q. 26. But when the strap and buckle are used, state what is the defect in their use, so far as this subject is concerned?

A. In using the strap and buckle the pad is more apt to roll around on the side of the collar, also is liable to slip down.

Q. 27. Suppose a pad to be open at the top, then what if any advantage has the hook over the strap and buckle attachment?

A. The same advantage as it is above.

Q. 28. But when the pad is open at the top, isn't there greater liability when attached with strap and buckle to fall down around the horse's neck within the collar, than if the pad was closed at the top?

A. There is.

Q. 29. Which do you sell the greater number of: the Des Moines pad with the strap and buckle at $6.00 a dozen, or the same pad with metallic hooks at $6.50 per dozen?

A. The Des Moines pad with metallic hooks.

Q. 30. Did you make this Des Moines pad prior to the introduction of the McClain pad to the market? If so, how did you then secure the pad to the collar?

A. We did. We used the strap and buckle on the said pad.

Q. 31. You have stated approximately the number of Mc Clain pads for the years 1884, 1885 and 1886; will you now please state in the same way the numbers of all other pads for the same years sold by you as nearly as you can, but in making this estimate I wish you to omit from it such of the Des Moines pads as have the McClain grasping hook?

A. We have sold in 1884, two hundred dozen; 1885, three hundred dozen; 1886, five hundred dozen. These were pads without hooks.

Q. 32. At what price per dozen did you sell the great majority of the pads referred to in your last answer?

A. On the average of $4.00 per dozen pair.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 33. You are selling sweat pads as one of McClain's agents under a contract with him, are you not?

A. Yes, sir.

X-*Q.* 34. You find it more profitable to sell the McClain pads than any other, do you not?

A. We do, per dozen.

X-*Q.* 35. This agreement with McClain fixes the prices, does it not? And are not the McClain pads sold by all parties dealing in them at uniform prices?

A. It does. All pads are sold at uniform prices,—I mean the McClain pad.

X-*Q.* 36. Have you ever advertised your pads, or adopted any special means to push them on the market, as compared with the advertisment and means employed by McClain?

A. No, sir.

X-*Q.* 37. You have spoken of the hooks holding the pads so that they could not slip as the horse was going up hill or down hill. Is this not also true of the strap and buckle?

A. No, sir.

X-*Q.* 38. Did you ever try it?

A. I have.

X-*Q.* 39. Does not the strap pass around the collar, and does not the hame fit over it?

A. Yes, sir.

X-*Q.* 40. Is not the hame buckled tight to the collar to prevent it from slipping when the horse is pulling a load?

A. The hame is buckled tight to the collar, but the strap on the upper part of the collar is loose.

X-*Q.* 41. What strap do you mean?

A. The strap on the top of the sweat pad.

X-*Q*. 42. How many straps does the sweat pad have to fasten it to the collar?

A. The Des Moines sweat pad has three straps; one at the throat and two at the top.

X-*Q*. 43. When you say that the straps do not hold the pad firmly to the collar, you have referred only to the particular kind made by you, have you not?

Objected to because it has not appeared in this cause thus far that there are two modes known of securing the pads to the collar by strap and buckle attachment.

A. No.

X-*Q*. 44. What one have you referred to?

A. I also refer to the Ohio sweat pad, which has four straps.

X-*Q*. 45. Then you have referred to those made by yourself, and what you have called the Ohio pad.

A. Yes, sir.

X-*Q*. 46. Who manufactures the "Ohio" pad?

A. McClain Manufacturing Company, A. Ortmayer & Son, and we have made them ourselves.

X-Q. 47. How do you know they have been made by A. Ortmayer & Son?

A. We had a sample sent in for one of our customers stating that the pad was bought from A. Ortmayer & Son.

X-*Q*. 48. You know nothing then except the statement of this customer so far as A. Ortmayer & Son is concerned?

A. I also received information from A. L. Olmsted, our travelling man, that Louis T. Anderson, of Carroll, Iowa, bought the Ohio pad from A. Ortmayer & Son.

X-Q. 49. Who was this customer that you say sent you this sample, stating that he bought it from A. Ortmayer & Son?

A. Louis T. Anderson, of Carroll, Iowa.

X-*Q*. 50. Was this sample provided with straps and buckles?

A. It was; had two straps on the bottom and a leather loop on the top.

X-*Q*. 51. What do you mean by straps on the bottom? How close to the bottom?

A. About two inches from the bottom.

X-*Q*. 52. When was this?

A. A year ago.

X-*Q.* 53. What did this customer send you this sample for?

A. To see if we could sell the same pad at the price that he was buying it for.

X-*Q.* 54. Did he afterwards give you orders for others like it?

A. No, sir.

X-*Q.* 55. Why not?

A. Could not meet prices.

X-*Q.* 56. Did you put that pad on a collar and try it to see whether it would slip in going up and down hill? I mean pad which your customer sent you stating that he got it from A. Ortmayer & Son.

A. No, sir.

X-*Q.* 57. Do you desire to swear that pads can not be attached to collars by straps and buckles so that they will not slip as the horse goes up and down hills?

A. I do.

X-*Q.* 58. You swear, do you, that no matter how tight you buckle the strap, the pads will slip, as you have described, and that this will always be the case?

A. I do.

X-*Q.* 59. How many different times have you tried it?

A. I have no idea how many times.

X-*Q.* 60. State as nearly as you can?

A. On retailing sweat pads in town we have an occasion to see the default every day.

X-*Q.* 61. And still you go on selling that sweat pad, and last year sold about five hundred dozen of them?

A. Two-thirds of the sweat pads sold last year outside of the "Success Pad" were pads without straps, and had nothing on them to connect them to the collar.

X-*Q.* 62. Before selling the "Success Pad" did you ever have any trouble with, or hear any objections to the McClain pad which you sold? By the "Success Pad" I mean in this question the one with the hinged hook, which is the present attachment.

A. No, sir.

RE-EXAMINATION BY COMPLAINANT'S COUNSEL.

Q. 63. You have stated that there was more profit in selling the McClain pad than in selling other pads. Does this apply to the Des Moines pad, whether with or without the hook?

A. This is not applied to the Des Moines pad, as our profit on the Des Moines pad with hooks or straps is larger.

Q. 64. The pads that you have reference to as not yielding so large a profit per dozen as the McClain pad, what do they sell at per dozen?

A. The "Ohio" pad and the "M" pad. Don't remember the price of the pads.

Q. 65. Do you know approximately the price at which the "Ohio" and the "M" pads sell? If so, state as near as you can?

A. The "Ohio" pad sold for $5.50, and the "M" pad for $6.00.

Q. 66. Which of these pads other than the McClain pad are stuffed with deer hair?

A. None of them, except the Des Moines pad. The Des Moines pads, both with hooks and those with straps, are made by the McClain Manufacturing Company to our order.

W. E. HOFFMANN.

W. G. REED.

Q. 1. State your name, age, residence, business and the name of the firm with wnich you are connected?

A. W. G. Reed, age 49, Saddlery hardware business, I do business under the name W. G. Reed, residence Des Moines.

Q. 2. Do you sell sweat pads for collar, if so what kind do you sell?

A. Number one "Success pad."

Q. 3. How long have you been selling this pad?

A. I think it is about three or four years.

Q. 4. Please state about the number you sold during the first year that you handled them and the number you sell now per annum?

A. About twenty-five dozen the first year, I sell now about a hundred and fifty dozen per annum?

Q. 5. Has this increase been regular the period of your handling the pad?

A. It has.

Q. 6. To what do you attribute this great increase in your business of selling this Pad?

A. I think it is on account of the spring that fastens the pad to the collar.

Q. 7. How if at all, has the introduction of this hook pad affected the market for pads?

A. I do'nt know how to answer that except that it has increased the trade.

Q. 8. Has it had any effect upon the harness makers in making their own pads? If so, what?

A. It decreased the manufacture of collar pads by harness makers.

Q. 9. Has the increase in this pad been of a remarkable or of a commonplace character?

A. I think it has been an increase of a very remarkable character.

Q. 10. Suppose you or any other dealer were to cease handling a sweat pad with a metallic grasping hook, for attaching it to the collar, what effect would it have upon your trade; in other words is there any other pad made by which you could keep your trade?

A. If we did not keep the pad we would have to go out and buy them, or the trade would go where they could get them.

Q. 11. While you sold pads having the hook attached like McClain single roll spring did you hear any objections to that mode of attaching the spring?

A. I don't think I ever did.

Q. 12. Suppose that the hinged spring had not been introduced, I want your opinion as to whether or not the Single Roll Spring would or would not have increased in popularity in about the same way that the "Success Pad" has increased?

A. It would have increased, but whether it would have increased—I dont know how to answer it.

Q. 13. Have you any donbt as to whether the increase would have continued with the Single Roll Spring if the Hinge Spring had not been introduced?

A. I have no doubt but what the increase would have continued if the Hinge Spring had not been used.

Q. 14. What do your customers generally say as to the merit of this grasping hook on the McClain pad?

A. They say it is the best hook that they have used.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 15. Is your house selling the McClain pad as one of his agents under a contract fixing the prices?

A. We are not an agent of theirs, but we have signed such a contract.

X-*Q.* 16. Did you ever sell sweat pads detachably connected with the collar by straps and buckles before the introduction of the McClain pad?

A. I never did.

X-*Q.* 17. You have spoken about the trade passing from the harness makers to the jobbers; did not this change begin long before the introduction of the McClain pad?

A. I don't know.

X-*Q.* 18. Do you sell pads at the present time detachably connected to the collar by means of straps and buckles?

A. I do not, and never have.

X-*Q.* 19. Did you ever hear of the springs on the McClain Single Roll Spring breaking?

A. I did the first lot that came out, I believe.

X-*Q.* 20. Don't you know that you did?

A. I do.

X-*Q.* 21. Was not that the case until the present attachment, in which the spring is hinged in the pad, was introduced?

A. No, sir; it was not.

X-Q. 22. What do you mean by the first lot?

A. The first we commenced to use.

X-*Q.* 23. You have said that you considered that the Mc Clain pad had increased in sales remarkably; do you not attribute that increase in large measure to the manner in which they have been advertised and pushed on the trade?

A. I do not.

X-*Q.* 24. Do you mean to say that that has had nothing to do with the sales of the pad?

A. As far as I know it hasn't.

X-*Q.* 25. In your opinion would the sales of the McClain pad have been as extensive without such advertisng and pushing on the trade?

A. Like all other things, if it was advertised largely there would be a greater demand.

X-*Q.* 26. Then you do think, do you not, that some of the success of the McClain pads is attributable to the manner in which they have been advertised and pushed on the market?

A. I think part of the success is due to that.

X-Q. 27. Do you know of any other sweat pad that has been advertised to anything like the extent that the McClain pad has been?

A. I do not.

X-*Q.* 28. Do you sell any other kind of pads than the McClain?

A. I do; the "Diamond" pad, made by Jacob Strauss, of St. Louis.

RE-EXAMINATION BY COMPLAINANT'S COUNSEL.

Q. 29. You have stated that you have not known any other pad to have been so well advertised as the "Success Pad." I would ask you have you known any other pad that would have justified as much advertising? If so, what one?

A. I don't know of any other pad that would justify, in my opinion, that amount of advertising;

RE-CROSS-EXAMINATION.

Q. 30. In speaking of the "Success Pad" what have you meant?

A. I mean McClain & Anderson No. 1 "Success" sweat pad, whether they had the single roll spring on or the present attachment.

W. G. REED.

Q. 1. State your name, age, residence, occupation and with what house you are connected and how.

A. My name is Charles F. Steinacker, age forty-five, residence, St. Joseph, Missouri. I am manager of the saddlery department of the Wyeth Hardware and Manufacturing Company.

Q. 2. Does your house deal in sweat pads for horse collars?

A. Yes.

Q. 3. Did it ever manufacture sweat pads and does it now manufacture sweat pads, and describe the character of the sweat pads so manufactured by your house.

A. Yes, we have manufactured. We now manufacture a pad in two pieces, which is tied to the collar by means of leather strings.

Q. 4. How long have you manufactured this pad?

A. About ten years.

Q. 5. Do you sell the McClain pads having the metallic grasping hooks, and how long have you been selling them?

A. We do sell them; have sold them, and for about three years.

Please state approximately, as close as you can from recollection, how the demand for this pad has increased with your house since you commenced to handle it.

A. It has increased about fifty per cent every year.

Q. 7. Have you any recollection as to how many you sold the first year you handled those pads?

A. About four hundred dozen.

Q. 8. How many did you sell last year and how many have you ordered for 1887?

A. About nine hundred dozen last year and two thousand dozen ordered for this year.

Q. 9. Before you commenced to handle this McClain pad, state as nearly as you can, the largest number of pads which you sold in one year.

A. About three hundred dozen. These were such pads as we manufactured and were all fitted with strings to tie them to the collars. We did not put the strings on. The harness maker did that.

Q. 10. Of this class of pads, how many do you make and sell per annum now?

A. The number is so small, I have not paid any attention to it.

Q. 11. State the reason, if you know, why you have practically ceased to manufacture and sell these pads?

A. Because of the demand for a patent pad.

Q. 12. State more particularly what you mean by a patent pad.

A. A pad with a better attachment for fastening to the collar.

Q. 13. State the reason why this McClain pad has had this largely increased demand of which you have spoken, and practically superceded the sort of pad you heretofore manufactured.

A. The trade demanded such a pad.

Q. 14. Look at the pads lying before you, specimens of the McClain pad and point to the feature if you can that is the cause of this increased demand.

A. It is the hook fastening that attaches the pad to the collar.

Q. 15. Suppose your house or any other similar house, should cease to handle the McClain pad. Is there any pad that you know of without such metallic grasping hook, by which you could keep your trade or any respectable portion of it?

A. I cannot speak for any other house, but can for our own house. If we did not have that pad, our sales would be lessened.

Q. 16. How much lessened in your judgment would your trade be in pads?

A. I would say about one half.

Q. 17. I assume that you are familiar with the different modes of attaching these grasping hooks to the pad, shown respectively in Exhibit "McClain Single Roll Spring" and in Exhibit "Present Attachment." What I desire to ask you is, what if any complaint was made against those illustrated by "Single Roll Spring" before the hinge or "Present Attachment" came into use.

A. No complaint as to either of them.

Q. 18. Is there in your judgment any practical difference between these two modes of attaching the grasping hooks to the pads?

A. Not having any practical experience, could not say.

Q. 19. Have you recently received any orders calling for "Single Roll Spring" in preference to the "Present Attachment." If you have, state from whom the order was received and when?

A. Yes sir, we have received such an order within a month, from one of our customers whose name I cannot recall.

Q. 20. What kind of "Success" or McClain pad do you handle? Describe it.

A. The "No. 1;" a pad all in one piece. The "No. 10;" a pad in two pieces. The "No. 1" has two hooks and the "No. 10" four hooks.

Q. 21. This "No. 10," is it or is it not in its general construction like the pad that you have heretofore manufactured.

A. It is.

Q. 22. Is there any substantial difference between the pads manufactured by you and this number ten "Success" other than the existence of the metallic grasping hooks upon the latter while the former were made to be secured to the collar by strings attached to the pads and passing around the collar?

A. Not very much.

Q. 23. Now I want to know exactly the reasons why, if you can tell me, this "No. 10" with grasping hook is preferred by the trade to the substantially similar pad, manufactured by you, tied to the collar by strings.

A. On account of the patent attachment.

Q. 24. Well, but more particularly, what if any objection existed to the string pad that was overcome by the metallic grasping hook.

A. The inconvenience of attaching the pad to the collar.

Q. 25. Was there any disposition or liability of the tie string pad to slip inside the collar when in use, and is there any such disposition with the grasping hook?

A. I cannot answer that question, having no practical experience.

Q. 26. But did you or did you not hear from your customers and the trade generally that these pads were obnoxious for this cause?

A. I did.

Q. 27. Please state exactly what this objection was, if you heard of it generally.

Defendants counsel objects to the question as calling for mere hearsay evidence.

A. The mode of fastening the pad to the collar.

Q. 28. You do not exactly get the point of the question. What I desire to know is, the character of inconvenience, if any, that arose from the tying of the pad to the collar, and if you have not practical experience of any such inconvenience, but know of inconveniences incident to its use, that you have heard spoken of in the trade, you may state what these inconveniences are.

A. I could not specify any of these inconveniences.

Q. 29. Did you ever hear it stated that a pad secured by a tie string to a collar, was liable to slip down inside the collar?

A. Yes, sir.

Q. 30. Was this fact generally known or not long before the McClain pad came out?

A. I should think so.

Q. 31. Was this regarded as a trivial or serious objection to the use of the tie string for securing a pad to the collar?

A. Serious.

Q. 31. At what price per dozen did you sell, and do you now sell this tie string pad manufactured by yourself, and at what price do you sell the similar McClain pad, to wit: "Success" No. 10?

A. We sell our pad at from three and one-half to four dollars per dozen. The "No 10" we sell at five and one-quarter dollars per dozen.

Q. 32. Suppose you were to apply metallic grasping hooks, either such as "McClain single roll spring" or "present attachment" to your own manufacture of pads, such pads to remain exactly of the construction in all other respects that you have always made them; at what price could you or would you sell them per dozon?

A. We would make the price five and one-quarter per dozen.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 33. Does not your house sell the McClain pads under a contract fixing the prices, etc.?

A. Yes, sir.

X-Q. 34. Do not all the parties as you understand it, who sell the McClain pads, sell under a similar contract?

A. Yes, sir.

X-Q. 35. Does not this enable the pads to be sold by all parties dealing in them, at a uniform price, so that prices are maintained in the trade.

A. Yes, sir.

X-Q. 36. As to the old style of pads, which were fastened to the collar by strings or straps, there is no such regulation of prices, is there?

A. No, sir.

X-Q. 37. Do you not make a greater profit per dozen on the sale of the McClain pads, take them as they run, than on the sale of your own, take them as they run?

A. No, sir.

X-Q. 38. Why?

A. The profit willl average about the same.

X-Q. 39. You sell the McClain pad at a higher price than your own, do you not?

A. Yes, sir.

X-Q. 40. Then why do you not make more on them?

A. They cost more money.

X-Q. 41. That is, they cost you more money. Do you mean that?

A. Yes, sir.

X-Q. 42. And they cost the farmer more money?

A. Yes, sir.

X-Q. 43. Do they last any longer than the old style pads made by you?

A. I could not say.

X-Q. 44. When you speak of the old style pads being fastened to the collar by a string, do you mean a strap and buckle?

A. No, sir.

X-Q. 45. Just a string that tied?

A. Yes, sir.

X-Q. 46. How many strings did they have?

A. Generally four.

X-Q 47. On each one half of the sweat pad?

A. On the two halves of the sweat pad.

X-Q. 48. The sweat pad, I believe you have said, was made in two parts?

A. Yes, sir.

X-Q. 49. Were each of those parts as large as each of the two parts of the "McClain Single Roll Spring" and the "McClain Present Attachment" when divided transversely in the middle?

A. Not as large as the pad before me.

X-Q. 50. How large were they as compared to the pads before you?

A. About five-sixths of the size of the ones before me.

X-Q. 51. Did the upper ends of the pad when on the horse come together?

A. That depends a good deal upon what size of a collar it is used in.

X-Q. 52. These pads before you go over the horse's neck, do they not?

A. Yes, sir.

X-Q. 53. Then the fact that they hang over the horse's neck, would alone prevent these pads before you, from slipping down when in use, would it not?

A. Yes, sir.

X-Q. 54. If the old style pads were sewed together at the top like these, would they slip down?

A. They would not.

X-Q. 55. You have said that you had ordered two thousand dozen pads for the year 1887, and that the "No. 10 Success" pad was made in two parts. How many dozen of these two thousand are of the kind designated as "Success" pads "No. 10?"

A. About one half.

X-Q. 56. If the old style pad as you made it, were properly and carefully tied to the collar, which as you know increases in size from the top downward, do you think the pad would slip down in use?

A. I think it would.

X-Q. Is not the upper one of the strings on each pad tied around the collar at a point which is much smaller than the collar becomes below that point?

A. Yes, sir.

X-Q. 34. Do not all the parties as you understand it, who sell the McClain pads, sell under a similar contract?

A. Yes, sir.

X-Q. 35. Does not this enable the pads to be sold by all parties dealing in them, at a uniform price, so that prices are maintained in the trade.

A. Yes, sir.

X-Q. 36. As to the old style of pads, which were fastened to the collar by strings or straps, there is no such regulation of prices, is there?

A. No, sir.

X-Q. 37. Do you not make a greater profit per dozen on the sale of the McClain pads, take them as they run, than on the sale of your own, take them as they run?

A. No, sir.

X-Q. 38. Why?

A. The profit willl average about the same.

X-Q. 39. You sell the McClain pad at a higher price than your own, do you not?

A. Yes, sir.

X-Q. 40. Then why do you not make more on them?

A. They cost more money.

X-Q. 41. That is, they cost you more money. Do you mean that?

A. Yes, sir.

X-Q. 42. And they cost the farmer more money?

A. Yes, sir.

X-Q. 43. Do they last any longer than the old style pads made by you?

A. I could not say.

X-Q. 44. When you speak of the old style pads being fastened to the collar by a string, do you mean a strap and buckle?

A. No, sir.

X-Q. 45. Just a string that tied?

A. Yes, sir.

X-Q. 46. How many strings did they have?

A. Generally four.

X-Q 47. On each one half of the sweat pad?

A. On the two halves of the sweat pad.

X-Q. 48. The sweat pad, I believe you have said, was made in two parts?

A. Yes, sir.

X-Q. 49. Were each of those parts as large as each of the two parts of the "McClain Single Roll Spring" and the "McClain Present Attachment" when divided transversely in the middle?

A. Not as large as the pad before me.

X-Q. 50. How large were they as compared to the pads before you?

A. About five-sixths of the size of the ones before me.

X-Q. 51. Did the upper ends of the pad when on the horse come together?

A. That depends a good deal upon what size of a collar it is used in.

X-Q. 52. These pads before you go over the horse's neck, do they not?

A. Yes, sir.

X-Q. 53. Then the fact that they hang over the horse's neck, would alone prevent these pads before you, from slipping down when in use, would it not?

A. Yes, sir.

X-Q. 54. If the old style pads were sewed together at the top like these, would they slip down?

A. They would not.

X-Q. 55. You have said that you had ordered two thousand dozen pads for the year 1887, and that the "No. 10 Success" pad was made in two parts. How many dozen of these two thousand are of the kind designated as "Success" pads "No. 10?"

A. About one half.

X-Q. 56. If the old style pad as you made it, were properly and carefully tied to the collar, which as you know increases in size from the top downward, do you think the pad would slip down in use?

A. I think it would.

X-Q. Is not the upper one of the strings on each pad tied around the collar at a point which is much smaller than the collar becomes below that point?

A. Yes, sir.

X-*Q.* 58. And does not the hame pass over the string and is not the hame buckled down firmly and tightly upon the collar?

A. Yes, sir.

X-*Q.* 59. In view of the fact that the collar is larger below the point where the upper string is tied around it and of the further fact that the hame passes over the string and is tightly buckled down to the collar, do you think if the pad was carefully and properly tied, it would slip down?

A. Not having any practical experience, I could not say.

X-*Q.* 60. I have only asked for your opinion. Please give us that.

A. I should think not.

X-*Q.* 61. If the old style pad as made by you were made long enough for the two halves to meet at the bottom under the horse's neck, would they slip down in use?

A. I could not say.

X-*Q.* 62. What do you think?

A. I think they would.

X-*Q.* 63. When they were already against each other at their lower end?

A. I think they would.

X-*Q.* 64. How could they slip down any further when they were already together at their lower ends? In all these questions I have assumed that the pads were provided with strings and tied to the collar when in use?

A. Not having any practical experience, I could not say.

X-*Q.* 65. What do you think?

A. I could not say.

X-*Q.* 66. Did you ever know of these "Single Roll" hooks breaking, or ever hear complaints of their breaking?

A. No, sir.

X-*Q.* 67. Did you ever order extra hooks for your customers?

A. No, sir.

X-*Q.* 68. Did you ever advertise you own make of pads any thing like as extensively, thoroughly and vigorously, as the McClain pad has been advertised.

A. No, sir.

X-*Q.* 69. You have attributed the success of the McClain pad to the fact that they were provided with these attaching springs.

Do you not think that the manner in which they have been advertised and pushed with the trade, has contributed in a large measure to their extensive sale?

A. To a certain extent it has.

X-*Q.* 70. Do you not think to a large extent?

A. I could not say.

X-*Q.* 71. How many men has your house on the road selling your goods and among other things, the McClain pad?

A. We have five regular saddlery salesmen. We have twenty others on the road selling hardware, but would take orders for pads, but do not specially solicit orders for pads.

RE-DIRECT EXAMINATION BY MR. MOORE.

Q. 72. How many salesmen had you on the road prior to the time you commenced to handle the McClain pads?

A. About fifteen altogether; about four of these in the saddlery department.

Q. 73. Did not these men solicit orders for your pads in about the same way and to the same extent as they now solicit orders for pads?

A. They did.

Q. 74. Has McClain any men on the road that you know of?

A. No, sir.

Q. 75. When you say that he has done more advertising of pads than other manufacturers, to what do you refer. What kind of advertising does he do, any way?

A. Advertising in the saddlery trade journals that are published.

Q. 76. Did you ever see an advertisement of his that did not include as well common pads, that is, pads without the grasping hooks, as the "Success" pads.

A. Have not noticed particularly. I don't read all the advertisements.

Q. 77. What is the best form of advertising? Is it not keeping travelers on the road to solicit orders?

A. I am not posted in advertising.

Q. 78. But you would not say, would you, that a man "pushed" such an article on the trade, unless he adopted the modern mode, that of sending out traveling salesmen?

A. I think not.

Q. 79. Then, if McClain does not send out any traveling salesmen, the pushing of his pads upon the market, if it is done at all, is done by the jobbers, and in the same way and to the same extent that they push every other article they desire to sell, is that right?

A. Yes, sir.

Q. 80. Do your traveling salesmen still solicit and receive orders for your own manufacture of pads, if not, when did they cease so to do?

A. Not to any extent, since we have been handling the McClain pads.

Q. 81. Comparing the size of pads of your own manufacture with the "Success" pad No. 10, is there any material difference in the size in any direction?

A. I should think not. Comparatively about the same.

Q. 82. When the tie string has been made tight around the collar, it stands straight or transversely above the groove in the collar intended for the hames to lie in, and does not the securely putting on of the hames, in order to press the string into the groove, of necessity stretch pad, or string, or both, and will not, upon the next occasion of putting on the hames upon the collar there be sufficient loose string to permit the slipping of the pad, unless the pad is loosed from the collar after each use of the latter, and the strings tightened so as to take up the slack; thus preparing pad and strings to be again stretched upon the next application of the hames to the collar. Do you agree with me in this or not?

A. Not having any practical experience, I could not say.

RE-CROSS EXAMINATION BY MR. BANNING.

X-*Q.* 83. Does not the contract between your house and McClain provide that he shall sell his pads only through the jobbing houses and not directly to the retailers?

A. Yes, sir.

X-*Q.* 84. When he has the jobbing houses interested in selling his pads through their traveling men, and he himself is restricted from selling to the retailers, can you see any necessity of his having men on the road.

A. I should think he could have traveling men on the road.

X-Q. 85. Anybody can have traveling men on the road if they want to, do you see any necessity for McClain to have, in view of the way his goods are sold?

A. I should think not.

X.Q. 86. Has not the custom that used to obtain among harness makers of making pads for their customers given place to the practice of buying pads to supply the wants of their business?

A. Yes, sir.

X-Q. 87. Does not this change in the trade account in a large measure for the increased sales of sweat pads of the jobbing houses.

A. Yes, sir.

X-Q. 88. Did not this change in the trade begin before the introduction of the McClain sweat pads.

A. To a great extent.

CHARLES F. STEINACKER.

MARION SRITE.

Q. 1. State your name, age and occupation?

A. My name is Marion Srite, age 46 years, and retail dealer in and manufacturer of harness and saddlery.

Q. 2. Do you sell, and how long have you been engaged in selling sweat pads?

A. Ever since I have been in the retail business; about twenty-one years.

Q. 3. Did you manufacture pads, if so, how were they secured to the collar, and do you now manufacture such pads?

A. I manufactured pads and they were attached by a lace leather string or stitched in. I do not make them any more.

Q. 4. What pads do you now sell?

A. The "Success."

Q. 5. How long have you been selling them?

A. For four or five years.

Q. 6. How does the demand for them now compare with the time when you first handled them.

A. It is one hundred per cent better now.

Q. 7. You have sold, or have you, pads secured to the collar with strap and buckle.

A. Very few, if any.

Q. 8. What, if any defect, is there in the tie string or strap and buckle mode of attaching pad to collar; that is, what objections were found to their use?

A. It did not hold it to its place; it slipped around. I never used a strap or string on any pad that went over the horse's neck; they were always on pads made in two pieces.

Q. 9. Why did you not make pads in a single piece going over the horse's neck, and attached by tie strings or buckle and strap to the collar?

A. Simply because we did not. We never caught on to the point.

Q. 10. Well, suppose you use tie strings or strap and buckle upon a pad made in one piece, such as before referred to, would the pad then remain in place as well as the "Success" pad.

A. No, sir.

Q. 11. Please explain more particularly why it would not?

A. In the first place, the "Success" pad is braced from the top; it runs across and can't fall down. The spring holds it to its place at the bottom.

Q. 12. How is the tie string and strap and buckle mode of fastening the pad to the collar regarded by your customers, as well as yourself, since the introduction of the McClain pad with metallic grasping hooks?

A. They have gone out of use. I have a few on hand, but do not sell them as far as I am concerned.

Q. 13. You have some of these strap and buckle and tie string pads on hand, as I understand you. Do I understand you that they are not sold now by you because you do not want to sell them, or because nobody wants to buy them?

A. They are not sold simply because they are not called for.

Q. 14. Before the introduction of the McClain grasping hook pad, which mode of attaching the pad to the collar then in use, to-wit: sewing it in, or attaching by strap and buckle, sold best, and which was best?

A. Sewing in was best.

Q. 15. In the case of the two piece pad, would it be practical to have the bottom ends of the separate pieces meet under the horse's neck; and if not, why not?

A. No; simply because it would fill up; be of no use in pulling, but would be a detriment.

Q. 16. Would it not come in contact with a horse's windpipe, interfere with his breathing and tend to suffocate him?

A. It would.

Q. 17. If I have correctly understood your meaning, a two piece pad secured to the collar in any other mode than sewing in, prior to the introduction of the McClain grasping hook, would have been a failure. Am I right?

A. In my experience it would.

Q. 18. Were you familiar with the metallic grasping hook of McClain attached to the pad as shown in "McClain's Single Roll Spring" before the introduction of "McClain's Present Attachment?"

A. Yes, sir.

Q. 19. Did you ever hear any objection to the "Single Roll Spring" from your customers or others up to the present time?

A. No.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 20. I understand you to say that before the McClain pads were introduced you made and sold pads in two pieces, detachably connected to the collars by strings or straps. Is this correct?

A. Yes, sir; and also by stitching.

X-Q. 21. For how many years did you make this two piece string tied pad?

A. Ten years or upwards.

X-Q. 22. About how many of them did you make?

A. The last year I made and sold them, I made about twelve dozen; that is a small estimate.

X-Q. 23. Were these kind of pads a failure?

A. They were not a failure until they were superceded by something else; but they were not a grand success.

X-Q. 24. Did you ever see them made in one piece, passing over the horse's neck?

A. It is one hundred per cent better now.

Q. 7. You have sold, or have you, pads secured to the collar with strap and buckle.

A. Very few, if any.

Q. 8. What, if any defect, is there in the tie string or strap and buckle mode of attaching pad to collar; that is, what objections were found to their use?

A. It did not hold it to its place; it slipped around. I never used a strap or string on any pad that went over the horse's neck; they were always on pads made in two pieces.

Q. 9. Why did you not make pads in a single piece going over the horse's neck, and attached by tie strings or buckle and strap to the collar?

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Q. 11. Please explain more particularly why it would not?

A. In the first place, the "Success" pad is braced from the top; it runs across and can't fall down. The spring holds it to its place at the bottom.

Q. 12. How is the tie string and strap and buckle mode of fastening the pad to the collar regarded by your customers, as well as yourself, since the introduction of the McClain pad with metallic grasping hooks?

A. They have gone out of use. I have a few on hand, but do not sell them as far as I am concerned.

Q. 13. You have some of these strap and buckle and tie string pads on hand, as I understand you. Do I understand you that they are not sold now by you because you do not want to sell them, or because nobody wants to buy them?

A. They are not sold simply because they are not called for.

Q. 14. Before the introduction of the McClain grasping hook pad, which mode of attaching the pad to the collar then in use, to-wit: sewing it in, or attaching by strap and buckle, sold best, and which was best?

A. Sewing in was best.

Q. 15. In the case of the two piece pad, would it be practical to have the bottom ends of the separate pieces meet under the horse's neck; and if not, why not?

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A. Yes, sir.

Q. 19. Did you ever hear any objection to the "Single Roll Spring" from your customers or others up to the present time?

A. No.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 20. I understand you to say that before the McClain pads were introduced you made and sold pads in two pieces, detachably connected to the collars by strings or straps. Is this correct?

A. Yes, sir; and also by stitching.

X-Q. 21. For how many years did you make this two piece string tied pad?

A. Ten years or upwards.

X-Q. 22. About how many of them did you make?

A. The last year I made and sold them, I made about twelve dozen; that is a small estimate.

X-Q. 23. Were these kind of pads a failure?

A. They were not a failure until they were superceded by something else; but they were not a grand success.

X-Q. 24. Did you ever see them made in one piece, passing over the horse's neck?

A. I never did to my knowledge.

X-*Q.* 25. If they had been made in one piece passing over the horse's neck, and then properly tied to the collar, would they not, in your opinion, have remained in place in use?

A. It is a question I hardly know how to answer. Relatively to the other, I could answer it. It will not remain in place.

X-*Q.* 26. Why?

A. Simply because the lower end would be apt to slip and slide; it would be a little too far back or a little too far front.

X-*Q.* 27. Were they not tied at their lower ends also?

A. If I understand the pad to be in one piece, the only string is at the bottom; the top would stay in place, but the bottom would slide around.

X-*Q.* 28. Did you ever try a pad made in one piece and then properly tied it to the collar to see whether it would slip in use?

A. I have tried them with strap and buckle, which would be the same thing, I presume?

X-*Q.* 29. Made in one piece?

A. Yes.

X-*Q.* 30. When?

A. In the last five years. It may be in the last year. I have some on hand now.

X-*Q.* 31. Do you say that you have on hand now sweat pads made in one piece to pass over the horse's neck and to be attached to the collar by straps?

A. Yes, sir.

X-*Q.* 32. Who were they made by?

A. That I can not say. I think of the Burlington Saddlery Company of whom I bought them. I have never made any of that kind myself.

X-*Q.* 33. Look at this "McClain Single Roll Spring," which you first used of his, and state whether the bending or bearing in of the pad, caused by the stiff shank of the hook, did not gall or hurt the horse in use?

A. Not to my knowledge.

X-*Q.* 34. Did not these hooks break off or tear out from the pad?

A. I have had some to break off; none to tear out.

X-Q. 35. In use does not the hame bear against the spring hook on the pad clasped around the roll of the collar, so that you need to unbuckle the hames in order to remove or detach the pad from the collar?

A. I never had occasion to take a pad off.

X-Q. 36. Do you buy pads made by McClain which have no hooks or straps of any kind to connect them with the collars?

A. All that I have handled have hooks.

X-Q. 37. In use the tie straps of the pads which you used to make passed around the collar and were then pressed upon and held closely against the collar by the hames, were they not?

A. They were.

X-Q. 38. When they were thus held by the hames, do you think the pads were liable to slip out of place?

A. They were liable to slip when the hames were removed.

RE-DIRECT EXAMINATION.

Q. 39. Were they not also liable to slip unless they were tied up tight after each use, even while the strap was in place under the hame?

A. The half pad was inclined to work down, no matter how tight you clamped it. I mean the two part pad.

Q. 40. As I understand you, prior to the introduction of the McClain pads you never saw a pad made in one piece?

A. Not to my knowledge.

Q. 41. You stated that occasionly a grasping hook such as a "Single Roll Spring" broke. I want to get at about what proportion of them broke within your experience?

A. About two per cent.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-Q. 42. Did you ever see a pad made to be put on over the horse's head?

A. I have seen them.

X-Q. 43. In use?

A. No, sir.

MARION SRITE.

Q. 1. State your name, age and occupation?

A. My name is W. T. Wheeler, age, forty-four years, occupation that of retail dealer in harness and saddlery.

Q. 2. Do you manufacture or sell sweat pads for horse collars, and how long have you been engaged in that business?

A. We sell pads, but do not manufacture them now. We did manufacture them in the year 1876–77, and on up to 1879.

Q. 3. What kind do you sell now?

A. We sell various kinds. We sell what is called the "Osmer," the "Success," and one with the strap and buckle.

Q. 4. The kind that you made, how were they attached to the collar?

A. With a leather string put through the pad and tied around the collar.

Q. 5. How does the strap and buckle and tie string mode of securing the pad to the collar compare with the metallic grasping hooks of the McClain pad?

A. They do not compare very favorably; they do not give as good satisfaction.

Q. 6. What is the prominent defect in the strap and buckle and tie string for attaching pad to collar that make them inferior to the McClain grasping hook?

A. Well, they come untied and slip around, and make an ugly looking finish to the collar.

Q. 7. About what is the proportion of the strap and buckle pad that you sell as compared with the McClain grasping hook that you sell?

A. Well, there is a great deal more of the hook pad sold than the other; I could not exactly say what the proportion is. I sell about one to six of the strap and buckle as compared to the grasping pad.

Q. 8. What price do you sell these at respectively?

A. At sixty-five cents and seventy-five cents respectively; the grasping hook pad at seventy-five cents each.

Q. 9. What is your experience as to whether customers who buy the strap and backle pad come back and want others of the same kind, or whether they want the grasping hook pad?

A. I really have never noticed how that was.

Q. 10. How has the business in the grasping hook pad gone since you have been handling them; that is, has the demand for it increased; and if so, about how much?

A. It has increased: there is no mistake about that, as far as my experience has gone. I should say the increase is twenty per cent in the last year.

Q. 11. More particularly what I want to know is, whether the increase has been regular since you have been handling it, or whether only during the last year?

A. It has been regular since the people commenced using them.

Q. 12. How has it been in this regard with the strap and buckle attachment? Has the demand for it increased or decreased, and how much of either?

A. It has not increased. I do not know whether it has decreased or not.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 13. Why did you quit making sweat pads?

A. Because the others came into market, and it was less trouble to sell them already made than to make them.

X-*Q.* 14. What kind came into the market in 1879?

A. I don't really recollect what sort it was, or whether any came into the market at that time.

X-*Q.* 15. But along about that time you began to get them from the jobbers and quit making them yourself?

A. Yes, sir.

X-*Q.* 16. When did you first see one of the McClain pads?

A. I could not answer, for I do not really know.

X-*Q.* 17. It was about the year 1883 or 1884 that you began to handle the McClain pad, did you not?

A. Yes, sir.

X-*Q.* 18. How were these pads that you began to get about 1879 attached to the collar?

A. I think we still used the string and sewed them in occasionally.

X-*Q.* 19. Were they made all in one piece or two pieces, these that were fastened to the collar by strings?

A. They were made in two pieces.

X-*Q.* 20. When did you first see one attached by a strap or strings that was made in one piece?

A. It was somewhere along about the year 1883. I never saw one with a string attachment made in one piece.

X-*Q.* 21. Did not those which were made in one piece to go over the horse's neck, and which were then attached by strap and buckle, give satisfaction in use?

A. As far as I know, they did.

X-*Q.* 22. Would not the strap and buckle, particularly when the hame was buckled down into place, hold the pad in position and prevent its slipping?

A. Yes, sir; it would.

X-*Q.* 23. You have said that you sold pads provided with the spring hooks at about seventy-five cents apiece, and the pads provided with a strap and buckle at sixty-five cents apiece. Am I correct?

A. Yes, sir.

X-*Q.* 24. Is there not, Mr. Wheeler, some difference in the quality of the pads to account for this difference in price, aside from their method of attachment to the collar?

A. I think there is, sir.

X-*Q.* 25. Did you ever make or sell pads which were slipped over the horses' heads in putting them on?

A. No, sir.

X-*Q.* 26. How many different kinds of pads provided with metallic hooks do you sell? I mean from how many different manufacturers?

A. About three. The McClain, the Jacob Strauss and the Osmer.

RE-DIRECT EXAMINATION.

Q. 27. Do you mean to be understood as saying that a pad attached by a strap and buckle does not have a tendency to slip around under the collar?

A. If the hames are buckled on to it tight I don't think it can.

Q. 28. If buckled on so tight as this will not the hames pressing into the groove stretch the strap or pad?

A. It might stretch the strap.

Q. 29. And this again would require making the strap gradually tighter, and thus take up more of the strap in the buckle in order to prevent looseness of the strap?

A. Yes, sir.

Q. 30. Continuing this tightening process to prevent slack in the strap will ultimately tear the strap or the pad?

A. I should think so.

Q. 31. Do you mean to be understood as saying that the strap and buckle pad is not as good without reference to the hook as the "Success" pad?

A. I don't think it is.

Q. 32. Is there any pad in the market without metallic grasping hook attached that you could use as a substitute for your present trade, or that would even fill one-half the present demand for sweat pads?

A. Of course if there was no pad with a hook on it, they would have to use some other pad.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-Q. 33. Before you began to sell the McClain "Present Attachment," which has a hinge hook, did you sell his "Single Roll Spring," which was riveted to the pad?

A. Yes, sir.

X-Q. 34. Did your customers ever have any trouble on ac- of their breaking, or other difficulty?

A. Not that I know of.

Q. 35. In removing one of the McClain sweat pads from the collar, is it not always necessary to unbuckle the hames, which press against the spring when drawn down in the groove in the collar?

W. T. WHEELER.

Q. 1. State your name, age, residence, occupation, and the name of the house you are connected with and how been connected?

A. Herman Kiper, age 33, Atchison, Kansas, merchant, connected with L. Kiper & Sons, a member of the firm and buyer for them.

Q. 2. Does your firm deal in sweat pads for horse collars, and for how long have you dealt in them?

A. We deal in them and have dealt in them for four years.

Q. 3. In whose manufacture of pads do you deal?

A. E. L. McClain Manufacturing Co's goods.

Q. 4. Please state as near as you can how many of those pads you sold the first year you dealt in them, and the number you sold last year?

A. The first year I should judge we sold between fifty and one hundred dozen of them, and the last year I should judge fully twelve hundred dozen.

Q. 5. Please state about the rate of increase in the demand for these pads from first to last?

A. We have had an increased sale on them every following year, from the time we commenced handling them.

Q. 6. Did you observe any difference in the increase during the different periods in which you sold pads, with "McClain's Single Roll Spring" and pads which had the "McClain present attachment?"

A. We have sold more of the pads since they had the "present attachment," but I don't know whether it was the "present attachment" that was the cause of it.

Q. 7. While you sold pads containing the "Single Roll Spring," did you ever hear any complaints from your customers about them?

A. I heard a little complaint, but not enough, I think, to affect the sale of them.

Q. 8. What is the feature of the McClain pad that gives it its popularity, if you know?

A. Well, I think the hook has more to do with it than anything else. At the same time the quality of the pad, no doubt, helps it some.

Q. 9. To get at your exact meaning, I will ask you to assume that your house or any other similar house should cease to deal in pads with this hook attachment, but were to keep in place thereof either the McClain or any other pad in the market that had not this grasping hook for connecting with the collar, such pads to be connected to the collar either by sewing them into the collar or by connecting with the collar by tying strings, or with strap and buckle: I want to know what the effect would be upon your trade of thus dispensing with metallic grasping hooks. I want your opinion based upon your observation on this matter?

A. I can say for our trade—I don't know anything about anybody else's—I would expect a large decrease in the sale of the pads if they were fastened into the collar any other way named except by the hook. As to the amount of decrease, it would be hard to estimate.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 10. Did you ever sell pads, detachably connected to the collar by any other means than the metallic springs?

A. The only way we ever handled sweat pads, except the spring hook, were those to be sewed in the collar.

X-Q. 11. Then your belief, expressed in your last answer on the direct, that your sales would greatly decrease if you should cease to sell pads provided with the metallic attachment, and adopt in their place strings or straps and buckles for attaching the pads to the collar, is founded on no actual experience in the sale of the last-mentioned pads. Is this correct?

A. I don't get my experience from selling strap and buckle pads, but I get it from another direction. In most all cases the demand from our customers is for hook pads, and rarely ever do they call for them with strings or buckle and straps.

X-Q. 12. You are selling the McClain pads under a contract with him, fixing prices &c., are you not?

A. Yes, sir.

X-Q. 13. Is there not a greater profit to your house from the sale of the McClain pads, than from the sale of any other per dozen?

A. We handle only the McClain make of pads. We also handle one made by the McClain Co., that has no hook attachment, which does not cost as much money as the hook pads, we do not make as much per dozen on them as on the hook pad, but we make a better percentage on them.

X-*Q.* 14. But you handle the McClain pads because from your arrangement with him, and from the manner in which the prices are maintained, it is more profitable to your house than any other kind. Is not that so?

A. That has something to do with it; we, however, have never handled any other pad with but one exception. I forgot to state in my former answer, that there is one other pad, that we handle a few of. That is the Risser sectional pad. One of our greatest reasons for handling the McClain hook pad is, that we have them well introduced with our customers, and have a large demand for them.

X-*Q.* 15. How many traveling men do you have selling them?

A. Four, that sells them with other goods.

X-*Q.* 16. Have you ever known any other sweat pad advertised or pushed on the market, anything like as extensively or as vigorously as the McClain pad?

A. I have seen other pads advertised, but I can not say as extensively as the McClain pad?

X-*Q.* 17. How long have you been connected with your present business?

A. Ever since our house went into the saddlery business, four years ago.

X-*Q.* 18. While you were handling the McClain "Single Roll Spring," which was riveted to the pad instead of being hinged to the pad as is his present attachment, did not the hooks break or tear off from the pads, and was not this an occasion for complaint?

A. All I can say is, that we have had very little complaint from any source since we began handling the McClain hooks.

X-*Q.* 19. Before you began to sell the McClain "Present Attachment," were you not in the habit of ordering extra hooks to supply the place of any that broke?

A. I don't remember of ever ordering a hook.

RE-DIRECT EXAMINATION.

Q. 20. State the prices at which you sell the McClain pads with the hooks on, the McClain pads without hooks, and the "Risser Sectional Pads" respectively?

A. No. 1 "Success" hook pad, we sell for $6.50; the No. 10 "Success" with hook, $5.25; McClain without the hook, No. "C" $3.50 and the "Risser" Sectional $5.50.

Q. 21. You have stated about the rate of increase of your sales of the McClain pads, but have not distinguished in this particular between those having hooks and those not having hooks. Confining your attention to McClain pads without hooks, have your sales of them increased or otherwise, and how much?

A. We sell but very few of the pads without hooks. There may have been a small increase in the dozens, I can't say positively about that, but the great increase has been on the hook pads.

Q. 22. Does Mr. McClain keep any travelling salesmen on the road if you know?

A. The only travelling salesman I ever knew, that came from Mr. McClain's house, was the one I bought the first bill of pads from about four years ago, if I remember right. I have not seen one since that time.

Q. 23. If you know what means Mr. McClain takes of advertising his pads, state it?

A. The only advertisements that I remember seeing were in the journals devoted to our line of business.

Q. 24. Did you ever see a McClain advertisement, that did not equally well advertise his pads without hooks as his "Success" or hook pads, and you may state also how it is with his annual catalogue in this particular.

A. In all his advertisements that I have seen where illustrated, his pads without hooks were also shown as well as his pads with hooks. In his catalogue you find a full line of his pads without hooks illustrated.

Q. 25. Would it be correct to your judgment of the trade to say that a manufacture is being pushed upon the market, when the manufacturer does not send out any traveling salesmen?

A. I look upon extensive advertising as denoting push, but would consider it more pushed if backed up by a traveling salesman.

RE-CROSS-EXAMINATION.

X-*Q.* 26. About how many jobbing houses throughout the country are selling the McClain pad, giving a rough estimate?

A. It would be a hard matter to give you anything like an estimate of how many, but I should judge a large majority of the jobbers in the country handle them.

X-*Q.* 27. About how many jobbers are there in the country in your line of business?

A. I don't know exactly how many; have heard it estimated at four hundred.

X-*Q.* 28. These jobbing houses generally have men on the road selling their goods, and generally send out catalogues advertising their goods, do they not?

A. The jobbing houses that I know, in this section, all send out men; but very few of them send out catalogues. We send out no catalogues.

X-*Q.* 29. Where a house is selling the McClain pads, and have their men on the road, is it your understanding that these men endeavor to sell sweat pads the same as other goods in their line?

A. I can not say anything about other houses. Our men are instructed to sell sweat pads as well as anything else.

X-*Q.* 30. If the McClain pads are being handled by from one to three hundred jobbing houses, who have from one to a dozen men on the road selling them with their other goods, do you think it would be very necessary for McClain to have a force of traveling men in addition?

A. The traveling men for the jobbing houses selling the pads for their respective houses. I should think that if McClain could sell his pads by advertising or correspondence, I would not think it necessary for him to employ traveling salesmen. I would not employ them if I could sell my goods that way.

X-*Q.* 31. How long since you began to sell McClain's pads without hooks?

A. Nearly two years. Previous to that we manufactured the pads we handled without hooks, but bought them afterwards of McClain, as we could do so fully as cheap or cheaper than we could manufacture them.

X-*Q.* 32. Did the first McClain catalogue advertise or show pads without hooks?

A. I don't remember much about their first catalogue. I have paid but little attention to any but the last two issues.

X-*Q.* 33. His catalogues that he has issued for the last two years have been large and elaborate books, containing about a hundred pages, with numerous illustrations, testimonials and pictures, so as to make them very attractive, have they not?

A. Yes, sir.

X-*Q.* 34. Have you ever bought any McClain sweat pads, intended to be applied by slipping them over the horse's head and closed at both top and bottom?

A. I never have.

RE-DIRECT EXAMINATION.

Q. 35. You say that each of your traveling salesmen take orders for the McClain pads, don't they take orders for pads whether with or without the hooks and have they any intructions to confiine their efforts in that regard to one kind more than the other?

A. They are instructed to take orders for all kinds of pads and are not instructed to discriminate in any particular.

Q. 36. Do you know of any house in your line of business, whose salesmen discriminate in favor of the hook pads as against pads without hooks?

A. I do not.

Q. 37. Is there any pad that you know of made in this country other than the "Success" pad that would justify the amount of advertising that the "Success" pad would?

A. I could not say as to that as I am not sufficiently acquainted with other pads.

HERMAN KIPER.

Q. 1. State your name, age, residence and occupation?

A. My name is Clements Rohr, my age fifty-two, residence Atchison, Kansas, and am engaged in the saddlery and harness business.

Q. 2. Do you sell sweat pads and how long have you been selling?

A. I do and have made and sold them over twenty-five years.

Q. 3. State how those that you made were secured to the collars?

A. We sewed them in, some we tied in and some were buckled.

Q. 4. Have you sold any of the McClain pads with the metallic grasping hooks?

A. Yes, sir.

Q. 5. How does the metallic grasping hook compare with the tie string, and buckle and strap, in utility and convenience for connecting the pad to the collar?

A. I think it is superior to either of the other two.

Q. 6. What inconvenience, if any, is incident to the use of the other two?

A. My experience is that they don't stay in their place as well as the McClain hook, nor do they give the satisfaction.

Q. 7. What sweat pad is there the greatest demand for at present time?

A. That is a question that I can not tell, but what I hear I can tell, but I don't know.

Q. 8. What is the best means for attaching a pad to a collar that you know of?

A. The McClain hook is the best attachment in my opinion, for fastening a pad to a collar.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 9. Would not one of the McClain pads, if attached to the collar with straps and buckles be as useful and as comfortable to the horse, as if attached by the spring hooks?

A. It might perhaps be useful and comfortable, but I don't think it would be quite as good because it would slide a little and not stick to the collar quite as well.

X-Q. 10. Do you mean to say that it would slide if the strap was properly and carefully buckled around the collar, and the hames buckled down in place on the strap as in use?

A. My answer to that would be this, after the hames are on the collar, buckled on, it would answer the purpose if the strap were broad enough. The broader the strap the better it would hold and the better the hames would hold it. There would be more trouble and more annoyance in getting it adjusted before the hames would be on. My experience is, that they are hardly ever buckled tight enough, and even then they wouldn't quite hold the sweat collar in its place as well as the McClain hook.

X-Q. 11. Did you ever make sweat pads which were connected to the collar by straps in one piece, so as to pass over the horse's neck?

A. No, sir.

X-Q. 12. In your answer to the question before the last, were you speaking of a pad made in one piece like the McClain or in two pieces?

A. I was speaking of the ordinary sweat pad of older days made in two pieces.

X-Q. 13. Now I will ask you if a sweat pad made in one piece like the McClain pads were connected to the collar by straps and buckles, and the hames then buckled down into place would not be as useful and as comfortable to the horse, and as securely held in position, as it would be connected to the collar by the McClain hooks. Please give me your opinion?

A. I would prefer the McClain hook.

X-Q 14. I am not asking you which kind you would prefer, but your opinion on certain matters stated in my question. Please answer the question as now requested?

A. I believe the McClain hook will hold the sweat pad firmer and better, less wiggle and shifting, than a strap would.

X-Q. 15. In the case of the McClain pads and hooks, do you not have to unbuckle or loosen the hames in order to take them off?

A. Of course we do.

X-Q. 16. Look at this McClain "Single Roll Spring" and state whether you have ever sold any like it?

A. I have.

X-*Q.* 17. Did not your customers have trouble with it on account of its breaking and becoming torn from the pad.

A. I do not remember of any customers ever coming back and complaining of them, nor do I remember of ever seeing one break.

X-*Q.* 18. Did you ever make or sell any pads made in one piece, sewed together at the top and bottom, and put in place by passing the pad over the horse's head?

A. No, sir.

RE-DIRECT EXAMINATION.

Q. 19. Is it ever necessary or useful to remove the sweat pad without first unbuckling the hames?

A. We always unbuckle the hames. I haven't got to a trick yet of taking out the sweat pads without unbuckling the hames.

CLEMENTS ROHR.

I. S. JELF.

Q. 1. State your name, age, residence and occupation?

A. My name is I. S. Jelf, my age, 65 years, my residence, Atchison, Kansas; my occupation, harness making.

Q. 2. State whether you ever made sweat pads for horse collars, how they were attached to the collar and whether you make them now?

A. I have made a great many of them, I have always sewed them, in my manufacturing. I do not make them now.

Q. 3. Why did you quit making them?

A. After I got the "Success" pads, I had no demand for mine.

Q. 4. What do you know whether from your own experience in the use of sweat pads tied to the collar with straps and buckles, or with tie string, or from what you have heard your customers say, as to how satisfactory these two modes are, of attaching pads to collars?

A. My experienee is, that they are not a success at all, I have to judge from what my customers say, of course.

Q. 5. What is the objection that your customers all have made to the tie string and strap and buckle method?

A. They didn't remain steady enough in any one place. The pad is too movable.

Q. 6. How is the grasping hook attached to the "Success" pad, liked by your customers. State fully what you know about this?

A. All that I have spoken to, which is a great many, say that it is a great success. I never heard any complaint.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 7. When did you begin to buy sweat pads from dealers, instead of to make them for your customers?

A. This is the third year that I have handled them.

X-*Q.* 8. Were the first ones you bought, provided with hooks or with straps and buckles.

A. Hooks.

X-*Q.* 9. I understood you to say that you had made a great many, years ago, attached to the collar with straps and buckles. If this is not correct, state the facts.

A. It is not correct. I made a great many, but I always sewed them in. A few I tied, not more than three or four a year.

X-*Q.* 10. Did you ever make any in one piece, sewed together at the top and bottom, and put into place by slipping over the horse's head.

A. I never did.

X-*Q.* 11. Were those which you made and attached to the collar by strings or straps made in one piece like the McClain pad, or in two separate pieces?

A. Two separate pieces.

X-*Q.* 12. Then the complaint which you say you have heard from your customers where strings or straps are used were in reference to the two part pads, were they not?

A. They were.

X-*Q.* 13. Did you ever hear any complaint from your customers about the springs like this "McClain Single Roll Spring" breaking or tearing from the pads?

A. I have not heard any complaint.

I. S. JELF.

Q. 1. State your name, age, residence and occupation?

A. My name is Samuel Larish; my age, fifty-seven; and my residence, No. 110 South Eighth, Atchison, Kansas; my occupation, a harness maker.

Q. 2. State whether you were familiar with the usual modes of securing sweat pads to collars prior to 1883?

A. I am.

Q. 3. State what those modes were?

A. Well, they were tied on, sewed on and buckled on; are three of those ways.

Q. 4. State whether you are familiar now with the mode of attaching sweat pads to collars shown in the exhibits before you, to-wit: "McClain's Single Roll Spring" and "McClain's Present Attachment?"

A. I have seen them within the last year, and sold more or less of them. It has been about a year since I commenced handling them.

Q. 5. How does this grasping hook mode of attaching pad to collar compare in utility or convenience with the old modes, to-wit, stitching, tying and buckling?

A. It is far superior to either one of the old modes for several reasons. It holds the pad in place better than either tying or buckling, though not better than sewing.

Q. 6. What defect or inconvenience was found in the use of the tie string and strap and buckle mode, that made these modes objectionable?

A. Well, the inconvenience of the thing is that you always have to take the pad off when you take off the collar, and it is easier to do it with the clasping hook than with straps and buckles. The objection to the tie and buckle is that you can not fasten the pads in the collar; it will move either one way or the other, back or forward.

Q. 7. If you have had any considerable experience with teamsters and have heard them express their views as to the utility or inutility of this tie string or buckle and strap method, just state where it was and what they said about those modes, giving their language if you recollect it?

A. Oh! I have put on a great many pads and heard a great deal of fault found with the buckle and tying. I have changed a great many straps on pads, setting them either further forward or further back. The pad would work either one way or the other, and bring the buckle right under the hames. The most fault that I have ever heard found was in Ohio by the ship-timber men that came from Canada to Ohio to get out ship-timber. They used to find a great deal of fault with the tie or the buckle.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 8. Those pads that you used to fasten on with tie strings or straps and buckles were made in two parts, were they not?

A. They were mostly; I have seen them, though, closed at the top. I can not tell, but I think eight or nine years ago that I saw them.

X-*Q.* 9. Have you ever seen any that were closed at both the top and the bottom, so that in putting them in place they were slipped over the horse's neck?

A. I have seen a few of them.

X-*Q.* 10. Did you ever see them in use?

A. I don't know as I ever saw one of them used on a horse.

X-*Q.* 11. In taking off the McClain pads from the collar, you always unbuckle the hames, do you not?

A. I don't know whether they do or not.

X-*Q.* 12. Did you ever know of the "McClain Single Roll Spring" breaking or tearing from the pad in use?

A. I don't know as I ever saw one broken, but I have seen them tear from the pad.

RE-DIRECT EXAMINATION.

Q. 13. How often have you seen them tear from the pad?

A. Not very often; probably two or three of them; maybe more.

Q. 14. In question seven, direct, I asked you to state in the language of the teamsters, their objection to the tie string and buckle and strap. Isn't your reason for omitting to state their

exact language that they were always expressed in terse and strong expletives accompanied with considerable profanity, and that it is your respect for the court that makes you tone down their expressions?

A. Well, I wouldn't like to use the language that they did in the presence of any respectable person.

SAMUEL LARISH.

HERMAN F. LANG.

Q. 1. State your name, age, residence and occupation, and how long you have been so employed?

A. Herman F. Lang; age, twenty-nine years; Leavenworth, Kansas; occupation, wholesale saddlery at north-west corner of Third and Delaware streets, in Kansas City, Missouri. I have been so employed seven years. I am at present a member of the firm of H. F. Lang & Co., Kansas City, Missouri.

Q. 2. State how long, if at all, you have been familiar with the trade in sweat pads for horse collars, and what opportunities you have had for becoming acquainted with it?

A. I am familiar with the handling of sweat pads since I entered business seven years ago.

Q. 3. State what kind of sweat pads,—that is, how attached to the collar,—you dealt in prior to your knowledge of the McClain pad? And what kind you have dealt in since?

A. I have dealt in sweat pads prior to the making of the McClain sweat pad that were fastened to the collars by sewing them to the collar, or tying them in, or fastened with strap and buckle. I have since dealt in the above pads and the McClain & Anderson pads.

Q. 4. State how rapidly the demand for the McClain & Anderson pad has increased from the time you commenced to handle them until to-day?

A. The trade on sweat pads since McClain & Anderson began to manufacture them has grown to such proportions, that before they made pads, sales in them were hardly noticeable, and

at present it has grown to be one of the principal selling articles in our business.

Q. 5. Has there been any considerable increase or any increase whatever in the demand for the old pads, such as you have described, since the introduction of the McClain pad?

A. With us none at all.

Q. 6. What influence has the introduction of the McClain pad had upon this great increase in the demand for pads?

A. I don't understand the question fully.

Q. 7. What feature of the McClain pad is it that has made it popular and made this great demand for it?

A. In my judgment its shape and manner of attachment of the pad to the collar has created this demand.

Q. 8. You mean by manner of attachment, etc., the McClain metallic grasping hooks, do you not?

A. Yes, sir.

Q. 9. To get more accurately at your meaning, I will ask you, suppose you ceased to deal in pads having the metallic grasping hook, but relied upon other pads in the market, say pads exactly like the McClain pad, but without the grasping hook, what influence would such change have upon your trade?

A. In my judgment our trade in sweat pads would fall off very materially from its present proportions.

Q. 10. Have you ever made pads, and do you now?

A. We have made common sweat pads, but do not now.

Q. 11. When did you quit manufacturing them and why?

A. We quit about three years ago, and stopped making them because we found that we could buy them cheaper from other manufacturers than we could make them.

Q. 12. From what manufacturer did you get your supply of common sweat pads?

A. Those that we have handled we bought at McClain & Anderson Manufacturing Company.

Q. You have testified to a certain rapidity in the increase in the demand for McClain's pads; did you include in that answer the common sweat pads, or did you refer only to those of the McClain pads having the metallic grasping hooks?

A. I referred to the growth of the McClain pad with metallic grasping hook.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 14. How many men has your house selling the McClain pads with your other goods on the road?

A. Three.

X-*Q.* 15. You are selling the McClain pads under a contract with him regulating the prices, etc., are you not?

A. Yes, sir.

X-*Q.* 16. Taking into consideration McClain's own advertisements and catalogues, the advertisements and catalogues of jobbing houses dealing in his pads, and the traveling men from such jobbing houses selling his pads on the road, I will ask you whether you have ever known any other sweat pads that were advertised and pushed on the trade anything like as extensively and vigorously as the McClain pads?

A. Having not handled any other pad but the McClain make, and not doing any of the traveling for the house myself, I can not say what push is made in the different makes of pads.

X-*Q.* 17. You have not fully answered my question. I again ask you to state, whether you know of any other pad that has been advertised and pushed on the trade as the McClain pad has been?

A. I know of no pad that has this amount of advertising.

X-*Q.* 18. Were the old style of pads made by your house, and which were attached to the collar by a strap and buckle made in one or two pieces?

A. In two pieces.

X-*Q.* 19. Is not the quality of the McClain pad aside from the spring attachment, superior to the quality of the pads with which you were familiar before the introduction of the McClain?

A. Yes, sir.

X-*Q.* 20. Before the introduction of the McClain pad, had not the manufacture of pads, which had originally been in the hands of harness makers, begun to pass in a large measure into the hands of jobbing houses?

A. In my judgment, I think it had.

X-*Q.* 21. Before you sold the McClain "Present Attachment" which has the spring hook hinged to the pad, you sold the

McClain "Single Roll Spring" which had the spring hook riveted rigidly to the pad, did you not?

A. Yes, sir.

X-*Q.* 22, Did you ever have any complaint from customers or no, of the hook breaking or becoming torn off from the pad in the "Single Roll Spring" which was riveted to the pad?

A. I can not recall a single complaint.

X-*Q.* 23. Did you ever make or sell any pads closed at the top and bottom, so that in putting them in place, they were slipped over the horse's head?

A. I have never made such a pad, but have bought and sold them.

X-*Q.* 24. From whom did you buy them?

A. I think from McClain and Anderson.

RE-DIRECT BY COMPLAINANTS COUNSEL.

Q. 25. Does McClain or has McClain or McClain & Anderson ever issued an advertisement or catalogue that did not give eqnal prominence to their pads without the grasping hook, as they did to the "Success" or grasping hook pad to your knowledge?

A. I think they give all their make of pads either with or without hooks an equal showing in their advertisements.

Q. 26. Have your traveling men any instructions to give a preference to the grasping hook pad, or are they instructed substantially to give all pads an equal show and let customers have what they want?

A. They are instructed to give no preference, but to sell such pads as we carry in stock that are called for.

Q. 27. I understand you to have said in cross-examination, that harness makers were ceasing to make their own pads, before the introduction of the McClain pad. I have understood your direct testimony to mean in so far as it had touched this question, that it was the McClain pad that caused you to cease manufacturing pads and other harness makers so far as you knew. Please state what is the fact in relation to this matter?

A. I do not apprehend the question.

Q. 28. Was not the reason for you and other harness makers ceasing to manufacture their own pads, the demand for the grasp-

ing hook pad of McClain, which harness makers generally were not authorized to make?

A. The reason for discontinuing the making of the common pad is, as I have said before, we could buy them cheaper than we could make them, and the hook preventing either the harness makers or ourselves from making that pad, will not enable me to say what effect it would have to the above question.

RE-CROSS EXAMINATION BY MR. BANNING.

X-Q 29. There is more profit to your house from the sale of the McClain spring hook pads than from the sale of the old style pads without hooks, is there not?

A. Yes, sir, per dozen.

RE-EXAMINATION BY COMPLAINANTS COUNSEL.

Q. 30. How do the profits upon pads with hooks and upon pads without hooks respectively compare per hundred dollars worth of goods?

A. On those styles that we handle, the percentage is about alike.

Further deponent saith not.

HERMAN F. LANG.

SAMUEL M. KELSEY.

Q. 1. State your name, age, residence and occupation and how long you have been so employed?

A. Samuel M. Kelsey, age 32 years, wholesale saddlery business, reside in Kansas City, Missouri, I have been in the saddlery business fifteen years.

Q. 2. How long have you been familiar with sweat pads for horse collars?

A. About five years.

Q. 3. State whether you are familiar with what is known as the "Success" pad, that is the McClain pad with metallic grasping hooks, and how long have you been familiar with them?

A. I am familiar with them and have been for about three years.

Q. 4. How does the present demand in the market for that pad compare with the demand for it three years ago, and please further state how the present demand for that "Success" pad compares with the demand for all other kinds with which you are familiar?

A. The demand for the succcess pad is about four times greater now than it was three years ago. The demand for the "Success" is about the only demand we have for pads.

Q. 5. What feature of that pad is it that makes it thus popular?

A. 'Tis the hook used in fastening.

Q. 6. Were you familiar with the old modes of securing the pad to the collar, such as the tie string and buckle and strap?

A. Yes, sir.

Q. 7. What was the prominent defect, if any, in these last modes of attaching the pad to the collar, which was overcome by the grasping hook method?

A. The defect was that the pad could not be held in place by the tie strings and buckle and strap.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 8. How were these old style pads which were connected to the collar by buckle and strap made, in one or two pieces?

A. Principally in two pieces.

X-*Q.* 9. Did your house ever sell any pads made in one piece, and closed at the top and bottom, which were put in place by slipping over the horse's head?

A. Yes, sir.

X-*Q.* 10. In those pads which were fastened by tie strings or strap and buckle, did not the strings or straps pass over the hame when they were put on?

A. I never fitted pads with strings or straps over the hame. The usual method of fitting pads made in this manner is to have the strings or straps under the hame.

X-*Q.* 11. And the hames were then strapped tightly down into the groove of the collar over the straps in use. Is this correct?

A. Yes, sir.

X-*Q.* 12. Your house sells the McClain pads provided with spring hooks under an agreement with McClain regulating prices, etc., does it not?

A. Yes, sir.

X-*Q.* 13. Is there a greater profit per dozen to your house in the sale of these spring hook pads than in the sale of the old style strap and buckle pads?

A. Greater profit per dozen, yes.

X-*Q.* 14. How many men does your house have on the road selling the McClain spring hook pads?

A. Three.

X-*Q.* 15. Before the McClain spring hook pads appeared had not the harness makers ceased to make pads for their customers in large measure, and adopted the practice of buying them already made from the jobbing houses?

A. They had to a large extent.

X-*Q.* 16. Are not the McClain pads superior in quality to the old style pads which they have superseded?

A. I can't say that they are.

X-*Q.* 17. Can you say that they are inferior in quality?

A. I can not.

X-*Q.* 18. Were not the strap and buckle pads which you say your house has sold, and which you say were made in one piece, bought of McClain?

A. I don't remember as to that.

RE-EXAMINATION BY COMPLAINANTS COUNSEL.

Q. 19. Were not pads made in one piece and supplied with a strap and buckle fastening, sold by a house that you were connected with, prior to the introduction of the McClain manufacture?

A. Yes, sir.

Q. 20. Did you or did you not refer to such pads in your answer number 7.

A. Yes, sir.

Q. 21. The three traveling salesmen, to whom you referred in your cross-examination, sell pads with hooks, and pads without hooks, when they can, and all other articles connected with your business, do they not?

A. Yes, sir.

Q. 22. Do you know of any harness maker, then in the habit of making his own pads, but who ceased to manufacture pads before the McClain grasping hook pad was put upon the market?

A. No, I do not.

Q. 23. So far as your observation has gone, state why harness makers who used to manufacture their own pads, have ceased so to do, and purchase their supplies from the jobbers?

A. Because they can buy them cheaper and better than they can make them themselves.

Q. 24. Well, is it not also because their principal demand for pads is for the McClain grasping hook pad, and this they are not authorized to make?

A. Yes, I think it is.

Q. 25. You have stated that a portion of the reason for their ceasing the manufacture is that they buy their pads cheaper. Was there any manufacturer of pads who sold the pads cheaper to the harness makers, than they themselves could manufacture them (I mean common pads) before McClain and Anderson commenced to manufacture such pads?

A. None that I know of.

Q. 26. Well then, as I understand you, this change in the trade, whereby harness makers ceased generally to manufacture their own pads, commenced after the introduction of the McClain & Anderson manufacture and was caused entirely by their manufacture. Am I right or not?

A. You are right.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-Q. 27. Would you call yourself a practical man in the manufacture, sale or use of sweat pads?

A. Yes, sir.

X-Q. 28. Did you ever use them on horses?

A. No, sir.

X-Q. 29. Did you ever sell them on the road.

A. No, sir.

X-Q. 30. Did you ever manufacture them in the shop?

A. Yes, sir.

X-Q. 31. Stuffing and sewing them?

A. I have superintended the manufacture, the stuffing and sewing them.

X-*Q.* 32. That was done by hand, was it not?

A. By hand and machine, the rim of the pad was sewed by machine, the stuffing and tufting was done by hand.

Further deponent saith not.

SAMUEL M. KELSEY.

EDWARD N. UPTON.

Q. 1. State your name, age, residence and occupation, and with what house you are connected?

A. Edward N. Upton, age, forty-nine, Effingham, Illinois, salesman P. Hayden Saddlery Hardware, of the St. Louis branch.

Q. 2. You are a traveling salesman for that house, are you not? And you may state how long you have been employed as traveling salesman in that business?

A. I am a traveling salesman and have been for eleven years.

Q. 3. As such salesman do you take orders for sweat pads among other things?

A. I take orders for sweat pads.

Q. 4. Are you familiar with the McClain pad or collar with the metallic grasping hooks known as the "Success" pad?

A. Yes, sir.

Q. 5. What effect has the introduction of this "Success" pad had upon the market for other pads that you handled before the McClain pad came out? State what you know about this?

A. I don't know how you mean.

Q. 6. Prior to the introduction of the "Success" pad to the market did you sell other pads for your house; if so, how were they generally secured to the collar?

A. I sold sweat pads that could be sewed to the collar, and others that required no sewing. They were made like a horse collar sewed together at top and bottom, and not attached to the collar; and others that had strings to fasten around the collar.

Q. 7. Of whose manufacture were those sweat collars described in your last answer?

A. Mostly our own.

Q. 8. Do you manufacture any sweat collars now?

A. Only to order.

Q. 9. Why did your house cease to manufacture sweat collars, except upon order?

A. I can't answer that positively.

Q. 10. State when they ceased so to manufacture, and give us your opinion of the reason for such cessation?

A. When the demand for our sweat collars ceased, which was about two years ago, for want of demand.

Q. 11. What sweat collar, if any, was it that superceded the demand for the sweat collar of your own manufacture?

A. The "Success" collar.

Q. 12. How long have you been selling the "Success" collar?

A. About three years.

Q. 13. How does the demand for the "Success" collar at present compare with the demand say two years and a half ago. Has the demand increased or diminished, and how much?

A. The demand for "Success" sweat collars has increased about double.

Q. 14. How is it with the demand for any other sweat collars which you now sell?

A. About ten to one in favor of the "Success" pad.

Q. 15. What feature of the "Success" pad is it that has created this large demand for it?

A. I only know that from hearsay: cheapness, durability, and the way it is attached to the collar.

Q. 16. Well, is not the hook attaching them to the collar the feature that makes them sell, as compared with other pads?

A. That is one of them.

Q. 17. What other sweat collar do you now sell?

A. Mostly the "Leader," and our own manufacture.

Q. 18. State how both of those, the "Leader" and your own, are attached to collars?

A. The "Leader" is attached to a collar by two straps and buckles, our own is sewed together at top and bottom.

Q. 19. State the prices respectively at which these three pads are sold per dozen, to-wit: your own, the "Leader," and "Success"?

A. Our own from $4.50 to $12.00; the "Leader" at $6.00; "Success," No. 1, at $6.50, "Success," No. 10, at $5.25.

Q. 20. Apart from the hook on the "Success" pad, is it any better pad than the "Leader"?

A. I don't think it is. I don't think it is as good.

Q. 21. Well, inasmuch as the "Success" sells 50 cents per dozen higher; that there are ten times as many of them sold; that it is no better sweat collar than the "Leader" in other respects; is it not evident that it is the hooks on the "Success" that has created the body of the demand for it?

A. Yes, sir.

Q. 22. When the "Success" first came out, did you as a salesman have the duty of introducing it to many of your customers who had not seen it before?

A. Yes, sir.

Q. 23. I want to know whether there was any difficulty in persuading people to buy it, or did it create its own demand. Give us your experience in this regard?

A. There was as much difficulty in introducing it as any other new article; but now it sells without trouble, when needed.

Q. 24. Referring to your experience of sweat collars secured by strap and buckle to the horse collar, whether that experience was derived from contact with the trade either before or after the introduction of the "Success" pad. I want to know what is your general objection, if there be any, to those pads?

A. Well, my trade claims that the hook on the "Success" holds it better to the collar when teams back or go down hill. What pads do you mean; the "Success," or one with strap?

Q. 25. I mean what is the defect in the use of the strap and buckle pad, and whether this defect or inconvenience exists at all in the sweat collar with the metallic grasping hook?

A. My customers claim that the sweat collars with strap slip and get out of place, while the "Success" with the hooks does not.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 26. How long have you sold sweat collars fastened to the collar with straps and buckles?

A. About two years.

X-*Q.* 27. Of whose make are they?

A. Sommers Bros.

X-*Q.* 28. Are they made of as good material and workmanship as the "Success" collar?

A. Material and work is about the same as to quality.

X-*Q.* 29. Are they not what are also called sectional pads?

A. Yes, sir.

X-*Q.* 30. Did you ever sell any other kinds which were connected to the collar by straps and buckles?

A. Not that I remember.

X-*Q.* 31. You have spoken about the sales of the "Success" sweat collar being about ten to one in favor of the "Success." Did you mean that you sold about ten "Success" collars to one of any other kind, or about ten to one of all other kinds combined?

A. I meant ten to one of the "Leader" and our own make combined.

X-*Q.* 32. Your own make is sewed together at top and bottom and put in place by slipping over the horse's head, is it not?

A. Some of our own make are sewed together at top and bottom and slip over the horse's head and around the neck, resting on the shoulders, and others are made in halves and are to be sewed to the horse's collar between rim and shoulder.

X-*Q.* 33. When they are sewed together at top and bottom and slipped over the horse's head, no fastening is employed to attach them to the collar, is there?

A. No, sir.

X-*Q.* 34. There is a greater profit to your house, per dozen, from the sale of the McClain spring hook sweat pads, than from the sale of the "Leader" or your own, is there not?

A. I don't know.

X-*Q.* 35. Your house is selling the McClain sweat collar under an agreement with him regulating the price, etc., is it not?

A. Our house never told me so. I don't know of any agreement existing between our house and Mr. McClain, but I do know that I am not allowed to deviate in the prices.

X-*Q.* 36. How many men your house have selling the McClain sweat collar with other goods on the road?

A. At present six.

X-*Q.* 37. Have you ever known any other sweat collar advertised, sold by so many jobbing houses, and pushed on the market, anything like to the extent that the McClain sweat collar has been advertised, sold and pushed?

A. I don't know of any other sweat collar that has been advertised so much as the "Success," but I have worked harder to push others on the market.

X-*Q.* 38. What others?

A. Our own make.

X-*Q.* 39. How long has it been since you thus began to work to sell your own make?

A. Five or six years ago, since we first began to manufacture them.

X-*Q.* 40. Is not the demand for the "Success" pad with its spring hooks, in your opinion, owing in large part to the manner in which that pad has been advertised?

A. To some extent.

X-*Q.* 41. Before the introduction of the McClain spring hook sweat collar, had not the harness makers begun to purchase their sweat collars in large part from the jobbing houses, instead of making them?

A. Yes, sir.

X-*Q.* 42. Their ceasing to make sweat collars themselves and their practice of buying them from the jobbing houses has gone on since the introduction of the McClain pad, has it not?

A. Yes, sir.

X-*Q.* 43. You have stated that the complaint which your customers made to the strap and buckle pad grew out of the fact that they would slip out of place when in use. If they were properly and carefully fastened with strap and buckle, and the hames buckled down over the straps, would they slip, in your opinion?

A. Not if the hames were buckled tight on a good solid collar.

RE-DIRECT EXAMINATION.

Q. 44. As I understand you, the sweat collars sold by your house in addition to the McClain grasping hook sweat collar include: first, a sweat collar made in two parts and stitched to the collar; second, a sweat collar fastened together at top and bottom,

to be put over the horse's head, to lie under the horse collar without other attachment; and third, a sweat collar closed at top and opened at bottom, of the same general form as the "Success," attached to the horse collar by strap and buckle; and I further understand you that the combined sales of these three kinds amount in round numbers to about one-tenth of your sales of the "Success." Am I right?

A. Yes, sir.

Q. 45. It has been assumed in the cross-examination that you know that harness makers generally or a considerable number of harness makers who had been accustomed to make their own pads have ceased to make their own pads, and purchase them from the jobbers. I would ask you in this connection if you know of any considerable number of harness makers who have thus ceased to manufacture them; and secondly, I would ask, to how many harness makers you can point who thus ceased to manufacture prior to the introduction of the "Success" sweat pad?

A. I don't know that I could point to any harness makers who have ceased entirely to make a few pads occasionally. I can name fifty harness makers that do not make the bulk of their sweat collars now, but buy them already made from the jobbers.

Q. 46. Yes, but the point of the question is, what was the cause of their ceasing to manufacture; was it the introduction to the market of the McClain grasping hook pad, thus destroying the demand for their own make; or what was the cause?

A. I think the cause in the first place was that they could buy from the jobbers or manufacturers sweat collars cheaper than they could make them themselves, and that answered the purpose for which they were intended, and this was before the McClain "Success" sweat collar was put on the market.

Q. 47. Who manufactured sweat collars of any kind that took the place of the harness makers' own manufacture prior to the introduction of the McClain "Success" sweat pad. I mean, of course, what manufacturer of sweat pads made them sufficiently cheap for the purpose?

A. Quite a number of manufacturers of saddlery made sweat collars previous to the adoption of the McClain sweat collar that sold to harness makers.

E. N. UPTON.

Q. 1. State your name, age, residence and occupation and with what house are you connected?

A. George Cousland, 63 years, St. Louis, Mo., am engaged in saddlery business, am connected with P. J. Peters Saddlery Co.

Q. 2. Is your house engaged in trading among other things in sweat pads for horse collars, does it manufacture them, or has it ever manufuctured them?

A. We are engaged in trading in those articles, we have manufactured them, but not for a year back.

Q. 3. Does your house handle the McClain sweat pad, with metallic grasping hooks, known as the "Success" and how long has it handled them?

A. Yes, three or four years, I will not be positive which.

Q. 4. State whether or not the demand for that pad has increased or otherwise, while you have been handling them, and yon may state also whether this increase has been regular and about the rate of the increase, if you can?

A. The demand has increased regularly and I presume, in a general way, that each year has doubled the preceding year.

Q. 5. The pads which your own house made, how were they attached to the collars?

A. The pad which we used to make, were sold to saddlers, and were attached to the collar to be sewed in, in some cases there were leather strings used for tying the collar and in rare cases there were straps used for the same purpose.

Q. 6. Please state, if you can, why it was, that you ceased to manufacture these sweat pads?

A. We found that we could buy a pad which was quite satisfactory, cheaper than we could manufacture it; and the advertising of an outside pad led to calls from our customers for them, and the demand for our own make of pads gradually decreased, and by the outside pad, I mean the "Success" pad.

Q. 7. To what, if any feature of this McClain pad, do you attribute its rapid increase of sale?

A. Largely to its ready manner of being adjusted to the collar.

Q. 8. You have referred to the extensive advertising of the McClain pad, did you ever see any advertisement of it, or hear of any, whether by catalogue advertisements, in trade journals, or

otherwise, that did not give prominent place to sweat pads of the McClain manufacture, which did not have the metallic grasping hooks?

A. No, I did not.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 9. Do you attribute the success of the McClain pads with spring hooks, in large part, to their extensive advertising in the trade?

A. Yes, sir.

X-*Q.* 10. Before the introduction of these McClain pads, had not a change begun among harness makers, by which they had commenced to buy their sweat pads from jobbing houses, instead of making them for their customers as they had been in the habit of doing?

A. Yes, the use of sewing machines for sewing and quilting had to some extent at least put the manufacture in the hands of manufacturing jobbers.

X-*Q.* 11. Has not this practice of buying, instead of making their sweat pads gone on since the introduction of the McClain pad until now, harness makers make but few of their own pads?

A. Yes.

X-*Q.* 12. Is not your house selling the McClain pad under an agreement with him regulating the prices etc?

A. We are.

X-*Q.* 13. How many men have you on the road, selling the McClain pads with your other goods?

Ans. Four or five.

X-*Q.* 14. Is it not more profitable per doz. to sell the McClain pads with spring hooks than any other kind which your house sells?

A. It is.

X-*Q.* 15. In the case of the old style sweat pads which were attached to the collar by straps and buckles or by strings, I will ask you whether, when they were properly and carefully tied or strapped to the collar, and the hames properly buckled down on the strings or straps, as in use, the sweat collar would remain in place?

A. I think there is no question that the sweat collar sewed in, is the best so far as the real use of the collar is concerned, but the disadvantages of this mode of attachment are, that it remains in the collars and there is no opportunity to clean it, with regard to a buckle and strap, when properly adjusted and the hames put on properly there is no better way to fasten a sweat collar so far as its use is concerned.

X-*Q.* 16. These sweat collars fastened with straps and buckles were made in one piece passing over the horse's neck, so that they were closed at the top and opened at the bottom. Is this correct?

A. Not in every case. I have seen them in two pieces, so that they were open at the top and bottom.

RE-DIRECT EXAMINATION.

Q. 17. Have you had any actual experience in the use of pads with straps and buckles?

A. No; so far as I am personally concerned.

Q. 18. Upon what, then, do you base the opinion given in the fifteenth cross-question?

A. My answer to that question with regard to the use of sweat collars with straps was "with regard to a buckle and strap when properly adjusted and the hames put on properly, there is no better way to fasten a sweat collar so far as its use is concerned." The idea I wish to convey is, that there is no better way of securing a sweat pad so far as its use is concerned; the difficulty is in properly adjusting and fitting in that way.

Q. 19. Does or does not the McClain grasping hook obviate the difficulty referred to in your last answer?

A. It does to a large extent.

Q. 20. You have stated substantially in cross-examination that the demand for the McClain pad with the grasping hook has been attained in a measurable degree by the advertising of it. You have also stated in direct examination that Mr. McClain has given prominence in all his advertisements to his pads that have not these grasping hooks. And as your trade has not demanded the McClain pads without the grasping hooks I would ask you if it be not self-evident that it is not the advertising but the merit of

the hook that is the principal factor in the popularity of the "Success" pad?

A. I consider the McClain pads with the hook are preferable to those without the hook, but I still consider that the extensive advertising has helped the sale of both.

Q. 21. But is it not the fact that the demand for the McClain pad without the grasping hook has gradually decreased until you have ceased to buy any of them, while the demand for the hook pads has at the same time continued to increase? Now, if I am right about this, and that each has been equally advertised, is it not evident that it is the hook which has given popularity to the "Success" pad?

A. The fact is that the demand for the McClain pads without hooks has nearly altogether ceased with us; this is caused in some degree by other makes of pads being placed in the market without the hook, which take the place of those we used to get from the McClain Manufacturing Company.

Q. 22. So that in the case of the McClain pad without the hook the advertising has not increased the demand, but you think the demand for the hook pad is increased by the advertising?

A. I have stated before that I consider the hook attachment a decided advantage in a sweat collar, and that there has been almost no competition in our trade in sweat pads with hooks; that the McClain Manufacturing Company has had the field almost to themselves, while there has been a keen competition in the manufacture without hooks so far as our house is concerned. With regard to the advertising, I consider it perfectly legitimate and quite right when parties have a good thing to let people know it, and I believe that their advertising has increased very largely the demand for sweat collars.

Q. 23. Do you sell any sweat pads other than McClain hook sweat pads at present? If you do, about what ratio would the amount of such other pads sold by your house bear to the "Success" pads sold by you?

A. We sell other pads; the McClain hook pads form about two-thirds of the pads sold by us.

Q. 24. You have stated in cross-examination that harness makers ceased to make their own pads when jobbers or other manufacturers of pads commenced to use the sewing-machine in

their manufacture. Do you know of any person who used sewing-machines in the manufacture of pads prior to their use by McClain & Anderson?

A. I am familiar with the use of sewing machines in the manufacture of sweat pads before McClain & Anderson began. In place of quilting there were separate seams made, and the stuffing done between the seams. I have never known of quilting being done by the machine before McClain & Anderson did it.

Q. 25. Then you mean that it was the adoption of the ordinary sewing machine, for sewing seams in pads, that was the beginning of the change, whereby harness makers ceased to manufacture their pads and commenced to purchase them from manufacturers who used these common sewing machines?

A. What I would characterize as the common sewing machine, is not used in manufacturing; we use larger size sewing machine of the older patterns, and even to day such machines are not invariably used in country saddlery shops. The use of those machines for the larger manufacturers, enables them to sell goods to country saddlers at a lower rate than they could manufacture such goods, and the use of such machines in large establishments makes it desirable to push the sales of any thing that such machines can manufacture, that is one of the reasons why the manufacture of sweat pads was pushed by saddlery manufacturers.

Q. 26. Do you mean that your house used the large sewing machines of the common pattern for seaming pads, prior to the introduction of the McClain sweat pad?

A. I would answer that question by asking the date of the introduction of the McClain sweat pad, as I was not familiar with them till four or five years ago, and will say that we used the sewing machine in manufacturing sweat pads before I ever heard of the McClain pad.

Q. 27. Is it, or is it not the fact that the principal factor in this change in the trade of harness makers generally ceasing to manufacture sweat pads, and getting their supplies from the jobbers, was the decreased demand for their own manufacture, resulting from the increased demand for the hook pad?

A. The change was certainly produced by the offering for sale by exclusive manufacturers of sweat pads at lower rates, than they could be generally produced by the ordinary manufacturers.

This change was begun before the hook attachment was specially dwelt on, this attachment was so popular as no doubt to hasten the completeness of the change.

Q. 28. Was not McClain & Anderson the first firm to exclusively manufacture sweat pads in this country or in the world, so far as you know?

A. So far as I know, yes.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 29. In answering the last question but one you said "the change was certainly produced by the offering for sale by exclusive manufacturers of sweat pads at lower rates than they could be generally produced by the ordinary manufacturers." In what sense did you use the word "exclusive" manufacturers of sweat pads? What did you mean by the use of that word in view of the fact that in answering your last question you said that McClain was the only exclusive manufacturer of sweat pads that you know of?

A. I would say that in place of the expression that "the change was produced" in my answer, it would more fully express my meaning to say that the change was begun. I did not say that McClain was the only manufacturer of sweat pads; I said he was the first, so far as my knowledge is concerned.

X-*Q.* 30. Did you mean to say in answering the last two questions asked by Mr. Moore that the change about which we have been talking was begun or produced by the manufacture of the McClain pads?

A. So far as my knowledge extends, yes.

X-*Q.* 31. Do you mean now to say that harness manufacturers did not begin the practice of buying their sweat pads from the jobbing houses until after the McClain & Anderson pad appeared, about four years ago?

A. I have before said that the harness makers, the country trade, were in the habit of buying sweat pads from the manufacturing jobbers before that time.

X-*Q.* 32. Do you still say that?

A. Yes, I do.

GEORGE COUSLAND.

Q. 1. State your name, age, residence and occupation, and with what house are you at present connected?

A. Joseph J. Kreher, thirty-seven years of age, 1913 Hickory street, St. Louis, Mo. President of J. B. Sickle Saddlery Co.

Q. 2. Is your house engaged in the sweat pad trade; and how long has it been so engaged?

A. We sell sweat pads in connection with our business, and have done so ever since I can remember.

Q. 3. State how the different sweat pads that you deal in, are attached to the collar and by whom are they made?

Most of them that we sell are attached to the collar by a hook and made by McClain Manufacturing Co. We also sell other sweat pads manufactured by other parties which are attached by means of a strap, and some have no attachment at all and are perfectly plain.

Q. 4. Did your house ever manufacture sweat pads and to what extent; how were they attached to the collar and do you now manufacture any?

We manufactured sweat pads previous to four years ago. I don't think that we ever made over 200 doz. per year. They had no attachment and were intended to be sewed into the collar, except a few that had strings attached to be tied into the collar.

Q. 5. About how many sweat pads a year do you sell now and what proportion of them is the "Success" pad with the metallic grasping hook?

A. I judge we sell about 1250 dozen pads and about a thousand (1000) of them are McClain pads with the hook attachment, and balance are principally of the strap and buckle attachment.

Q. 6. Has there been an increase in the demand for the McClain hook pad and about at what rate has this increase been from the time you commenced to handle it till now?

A. Yes, there has been an increase from the time we first handled them. I should judge of about 25 per cent annually.

Q. 7. As I understand you, the amount of all pads that you sell other than the McClain hook pad, is about equal to your own manufacture of pads, when you did manufacture them?

A. We sell more of the pads other than the McClain pads than we did when we manufactured them, about 25 per cent per year more.

Q. 8. How do you account for this large demand for the hook pad, that is what if any feature of the pad is it, that has procured for it its present popularity?

A. I think the hook attachment is the principal feature of the pad's popularity, the trade seem to take to it from the fact that it can be easily attached to the collar, and save the time of sewing into the collar as the old style collar was formerly done.

Q. 9. Why did you cease manufacturing pads yourselves, when you did do so?

A. One reason was we were able to buy the pads about as cheap as we could make them, and another was the popularity of the hook attachment, which of course we did not have on our own make of pads.

Q. 10. You have stated that your present sales of the hook pad amount to about 1000 doz. per annum, can you state in the same way about the amount of your sales, during the first year you handled this pad?

A. I think we sold about 500 doz. the first year.

Q. 11. State if you know more particularly the reason the trade prefer the hook mode of attaching the pad to the collar, as compared to the strap and buckle method?

A. I think they are more easily attached to the collar than the strap and buckle.

Q. 12. State what is the character of the workmanship, material and general construction of this strap and buckle pad that you deal in as compared with the similar sized "Success" pad, but omitting any reference to hook in the comparison, and you may also state the price per doz. at which you sell each of these pads?

A. We consider the stock quality and finish of the strap and buckle pad about equal to the McClain pad. It is a patent pad and the price is on that account higher than it otherwise would be, but it costs us less money than the McClain hook pad, that is the "Success" pad. Our selling price for the patent strap and buckle pad varies, we in some cases get as much as we do for the McClain success pad, but in most cases sell them for 50 cents less per dozen.

Q. 13. In your advertisements and instructions to your traveling men, to which of these two pads do you give the prefer-

Q. 1. State your name, age, residence and occupation, and with what house are you at present connected?

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Q. 9. Why did you cease manufacturing pads yourselves, when you did do so?

A. One reason was we were able to buy the pads about as cheap as we could make them, and another was the popularity of the hook attachment, which of course we did not have on our own make of pads.

Q. 10. You have stated that your present sales of the hook pad amount to about 1000 doz. per annum, can you state in the same way about the amount of your sales, during the first year you handled this pad?

A. I think we sold about 500 doz. the first year.

Q. 11. State if you know more particularly the reason the trade prefer the hook mode of attaching the pad to the collar, as compared to the strap and buckle method?

A. I think they are more easily attached to the collar than the strap and buckle.

Q. 12. State what is the character of the workmanship, material and general construction of this strap and buckle pad that you deal in as compared with the similar sized "Success" pad, but omitting any reference to hook in the comparison, and you may also state the price per doz. at which you sell each of these pads?

A. We consider the stock quality and finish of the strap and buckle pad about equal to the McClain pad. It is a patent pad and the price is on that account higher than it otherwise would be, but it costs us less money than the McClain hook pad, that is the "Success" pad. Our selling price for the patent strap and buckle pad varies, we in some cases get as much as we do for the McClain success pad, but in most cases sell them for 50 cents less per dozen.

Q. 13. In your advertisements and instructions to your traveling men, to which of these two pads do you give the prefer-

ence if either, and which do you push with the greater energy on the market?

A. We don't advertise either pad; this strap and buckle pad which we were speaking of, we only recently started to handle and our instructions this season to our traveling men is to push this patent strap und buckle pad.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 14. Why do you desire to push the strap and buckle pad?

A. Because we make more money on it.

X-*Q.* 15. In use is the strap and buckle pad equal to the spring hook McClain pad?

A. This strap and buckle pad, the features of it are, that it is a patent sectional pad and I don't think it could be considered to be the same as the success pad, that is, the virtue of it.

X-*Q.* 16. Is not the strap and buckle so far as use is concerned equal to the hooks as a method of attachment?

A. I could not answer that as I have never used either, myself but the hook pad to our trade seems to have the preference.

X-*Q.* 17. Your house was selling sweat pads before the introduction of the McClain pad, was it not?

A. Yes, sir.

X-*Q.* 18. Before the introduction of the McClain pad, had not the harness makers begun to buy their sweat pads from jobbing houses, instead of making them for their customers as they had previously done?

A. Yes, sir.

X-*Q.* 19. Is not the McClain spring hook pad better in quality and workmanship than the old style of pads which was being sold at the time of its introduction?

A. Yes, sir; I think they are.

X-*Q.* 20. Did you ever know a sweat pad advertised anything like as extensively as the McClain spring hook pad has been?

A. No, sir; I never have.

X-*Q.* 21. Has not the manner in which it has been advertised and the superior quality of the pad as compared with others in the market at the time of its introduction, had a good deal to do with the extensive use into which it has come?

A. Yes, sir; I consider it has.

X-*Q.* 22. Does not your house sell the McClain pad under an agreement with McClain regulating the prices etc.

A. Yes, sir; we do.

X-*Q.* 23. Is it not your understanding that houses in your line of business prefer to handle a patented article, on which prices can be maintained by those authorized to sell it, than an unpatented article which everybody is at liberty to make?

A. Yes, sir.

X-*Q.* 24. In view of the consideration mentioned in the last question does not the trade prefer to push such patented article, say a patented sweat pad, although it may be no better in quality or utility than the unpatented?

A. I think so provided they see more money in the patented than in the unpatented article.

X-*Q.* 25. The experience of the business so far as your knowlege goes, is that more money can be made by handling a patented article than an unpatented one, is it not.

A. Yes, sir; provided there is a selling limit made the same as is on the McClain pad were there is an agreement to maintain prices.

RE-DIRECT EXAMINATION BY MR. MOORE.

Q. 26. Did you ever see any advertisement of McClain & Anderson or the E. L. McClain Manufacturing Co. issued by those concerns, that did not give equal prominence to their pads without hooks as to their pads with hooks?

A. I could't say. I never took particular notice as to that, I know the advertisement was for the "success pad.

Q. 27. There has not been, has there, any considerable demand for their pads without hooks as compared with the demand for the "success" pad, has there?

A. No, sir; we have not bought any without hooks for the past two years, of them.

Q. 28. If I am right in saying that their advertisements have given equal prominence to their manufacture without hooks as to their "Success" pad, and if there has been no considerable demand for those without hooks, while there has been a large and constantly increasing demand for the "Success" pad, would you

not say that the advertising of McClain & Anderson or E. L. McClain Manufacturing Co. has had a comparatively insignificant effect in procuring the present popularity of the hook pad as compared with the merit of the hook?

A. I consider that the advertising of either of the pads would create a more popular demand for the same?

Q. 29. What has been the principal cause of the popularity of the hook pad; mere advertising or the merit of the hooks?

A. I would say the merit of the hooks.

Q. 30. Assuming that you have a reasonable familiarity with the amount and character of the advertising done by the owners of the "Success" pad, how has it compared in amount with the advertising done by your own house of other articles?

A. I don't know how much money McClain & Anderson or E. L. McClain Manufacturing Company spend for advertising. We have a patent article that we advertise very extensively, but I think in a different channel from the way that this firm advertise their "Success" pad; that is, we advertise both direct to the consumer as well as the dealer, and probably run a great many more advertisements than they do in the same territory.

Q. 31. You are acquainted, are you not, with their annual catalogue and advertisements in trade journals? Assuming these to be their only channels of advertising, and that they have no traveling salesmen whatever, would you say that this is a larger amount of advertising than is done by your house or by the average successful jobbing house?

A. On considering the traveling salesmen, I would answer no.

Q. 32. You have stated in cross-examination that the "Success" pads, irrespective of the hook attachment, were rather better material and workmanship than the pads that you manufactured before the "Success" pad came on the market. I would ask you in this connection at what prices you sold those pads which were displaced in the market by the "Success" pad?

A. At a higher price than we can sell the same class of pads at the present time; say probably twenty-five per cent higher.

Q. 33. Then the general effect on the market price of pads of the introduction of the McClain manufacture has been to reduce selling prices?

A. As to the McClain Manufacturing Company I would not say exclusively; I think the establishing of pad manufactories generally, and their facilities in manufacturing sweat pads, is the principal cause of the regular run of pad that I refer to.

Q. 34. But McClain was the first to begin the exclusive manufacture of pads, was he not?

A. I could not say as to that. I think there was some other, but can not state who. It may be possible that McClain was the first.

Q. 35. How did the profit per cent of the pads manufactured by your house prior to the introduction of the "Success" pad compare with the profit derived from handling the "Success?"

A. I think it was about the same on what we sold.

Q. 36. At what price per dozen did pads of your own manufacture sell?

A. We sold them from $4.50 to $8.00, according to quality.

Q. 37. I will call your attention to your answer to cross-question No. 18, which will be read to you, and ask you are you quite certain that there was any dispostion on the part of harness men to cease manufacturing their own pads prior to the commencement of the McClain & Anderson manufacture, and will ask you further whether upon closer reflection it was not the decrease in the demand for their own manufacture consequent upon the increased demand for the "Success" pad that produced this change?

A. My recollection is, that the harness makers stopped manufacturing their own pads several years previous to the introduction of the McClain pad. I speak of our own territory, with which I am familiar.

Q. 38. Then the fact with relation to this matter is this, is it not, that at a time, five, ten or fifteen years prior to the introduction of the McClain pad, the retail harness makers commenced to discontinue the manufacture of pads, and the larger or wholesale houses commenced to manufacture them, and that this change went on gradually until the wholesale dealers had practically absorbed the manufacture of sweat collars; all this occurring prior to the introduction of the McClain sweat pad?

A. Yes, sir; such is my recollection.

Q. 39. And the most immediate and visible effect upon the trade caused by the introduction of the "Success" pad was that the demand for it from the users and small dealers caused the jobbers or wholesale dealers in their turn to cease manufacturing pads. Is that right?

A. Yes, sir.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 40. When you get an order for a certain number of "Success" pads, what kind of pads do you understand are called for?

A. They are usually ordered by numbers. We only carry one number, and fill our orders with that number.

X-*Q.* 71. Is not the "Success" pad generally understood in the trade to refer to the McClain pad provided with hooks rather than those which have no hooks?

A. Yes, sir; we so consider it, and the "Success" means the pad with hooks on it.

JOSEPH J. KREHER.

ISAAC MEYER.

Q. 1. State your name, age, residence and occupation, and with what house are you connected at present?

A. Issac Meyer, 38 years, St. Louis, merchant in saddlery, and am of Meyer, Bannerman & Co.

Q. 2. State whether your house deals in sweat pads for horse collars, and how long it has dealt in those articles?

A. We do, and have dealt in them for twenty years.

Q. 3. Whose manufacture of sweat pads do you deal in now?

A. We handle a few of our own make, a few of Sommers & Co. and known as the "Leader," but the principal pad handled by us is the "Success" pad.

Q. 4. The "Leader" I understand to be fastened to the collar with buckles and straps. State whether I am right, and state

also how the pads made by your own house are secured to the collar?

A. You are right so far as the "Leader" is concerned. The few pads manufactured in our establishment are without any device for fastening to the collar other than that known to the trade as the old fashion method of either tying around the collar or sewing them on. We have always made pads in that manner.

Q. 5. How long have you dealt in the McClain grasping hook pad known as the "Success?"

A. About three years, I think.

Q. 6. So far as you have been able to observe, what was the effect upon the market for these articles of the introduction of the "Succeess" pad?

A. According to my observation; that is, as far as our house is concerned with the trade of these goods, I can only say that after the pad known as the "Success" was introduced by us our sales for other pads diminished rapidly, and, of course, an increasing demand for the "Success."

Q. 7. State about how rapidly the demand for the "Success" pad has increased per annum from the time you commenced to handle them to the present time?

A. I would say that the increase the second year over the first was fully one hundred per cent, and the third year over the second not so great, from the fact that our trade had already taken hold of them in good quantities. There was, however, a healthy increase over the second year.

Q. 8. Please state according to your best recollection about how the number of sweat pads sold by your house the year preceding your taking hold of the "Success" compares with the number of "Success" pads now sold by you per annum?

A. About twenty per cent; that is, where we sell now say one hundred dozen of the "Success" we sold say not exceeding twenty dozen of all kinds of sweat collar pads before handling the "Success" pad.

Q. 9. Of the sweat pads now sold by you, about what percentage would the "Success" pad be, and what percentage of all other kinds taken together?

A. In answering this question I shall base my observation since the first of January, 1887, and I think it will be about fair to say that our sales of the "Success" pad has been perhaps ninety per cent of all sweat pads sold by us up to the present time.

Q. 10. What feature of the "Success" pad is it that has created this great demand for it?

A. Practically, I can not answer the foregoing; I can merely give my views; and my opinion is that the easy and rapid manner of attaching the pad to the collar, and besides the advantage, after being so fastened it remains in position.

Q. 11. In view of what you have stated as to the rapidity in the increase of the demand for the "Success" pad, would it be putting it unfairly or too strong to say that the introduction of these metallic grasping hooks has created a very decided revolution in the trade of sweat pads?

A. It would not be unfair at all.

Q. 12. I understand that you have no actual experience in the use of any of these modes of fastening, but what I desire to ask is, have you had sufficient conversation with the trade to be able to state what, if any defect, is generally recognized as incident to the use of the strap and buckle and tie string methods of securing the pad to the collar?

A. We have had no complaints regarding the "Success" sweat pad from any one to whom we ever sold, and from the fact that the other styles of sweat pads formerly handled by us are now nearly obsolete, the trade must certainly be well pleased with the metal fastening. I, of course, have spoken with quite a number of our customers with reference to other pads, but all preferred pads with the metal fastening.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 13. Does not your house sell the McClain sweat pad under a contract with McClain regulating the prices, etc.

A. Yes, sir.

X-*Q.* 14. Is it not your understanding that a majority of the jobbing houses in your line sell them under a similar contract?

A. That is my understanding.

X-*Q.* 15. How many men do you have selling the McClain spring hook pad on the road?

A. Ten men.

X-*Q.* 16. Do not most, if not all, of the jobbing houses in your line selling the McClain sweat pad also have men on the road as you understand it?

A. Yes, sir.

X-*Q.* 17. You have seen McClain's catalogues or advertisements or some of them, have you not?

A. Yes, sir.

X-*Q.* 18. From these advertisements, from the number of houses handling the McClain spring hook pads, and the manner in which those pads are sold by the traveling men, do you know of any other sweat pad that has been advertised or pushed on the market to anything like the extent that the McClain sweat pads have been?

A. No, sir.

X-*Q.* 19. Do not these facts account in some measure for the extensive introduction of these pads, in your opinion?

A. In some measure, but I would here add that all our agents carry among their other samples several other styles, than the McClain or "Success" pads.

X-*Q.* 20. Is not the McClain spring hook pads superior in material and workmanship to the old style of pads which they have superceded?

A. I think not. We handle a pad made by McClain, about the same style of finish as what is known as the "Success" the only difference is that it is without the patent fastening.

X-*Q.* 21. Yes, but I am asking if the McClain "Success" pads are not superior in quality to the ones you sold prior to their introduction, please give me your opinion on that?

A. As an illustration, I would say that a pad bought of McClain, prior to the introduction of the spring hook pad, a pad far superior to what is now known as the number ten "Success" was sold quite extensively, but after putting in stock, the number ten which is a pad more expensive than the pad above referred to and which is inferior in every respect to the pad first named, yet the number ten "Success" is sold for a considerably greater price than the other; this, of course, is be-

cause the number ten, as I take it, has the spring hook fastening.

X-*Q.* 22. How many of these pads bought of McClain, did you sell before the introduction of the spring hook pads?

A. We perhaps bought 100 dozen, a few more or less, we are however, still buying them.

X-*Q.* 23. Compared with pads not made by McClain, do you not consider the "Success" pads superior in quality or workmanship to those which you sold before their introduction?

A. There were some pads made prior to the introduction of this "Success" pad, wherein the workmanship as well as the material were far superior and of course plenty inferior.

X-*Q.* 24. Had not the harness makers before the introduction of the McClain hook pads begun to buy their pads from jobbing houses like your own, instead of making them as they had formerly done?

A. I suppose so.

X-*Q.* 25. Has not this change from making to buying their pads, gone on, since the introduction of the McClain spring hook pad, until now, harness makers make but few pads for themselves, is not this your understanding?

A. It is.

X-*Q.* 26. And the jobbing houses themselves are making pads less and less and buying them already made for their trade, is not this also true, so far as your experience goes?

A. It is.

X-*Q.* 27. Why has this change taken place in the trade?

A. I take it that the larger manufacturers who formerly made pads in quantities, found that the pads formerly made by them were unsalable that is, after the introduction of the spring hook pad and that manufacturers, who, prior to that time, could maintain quite a force on this line of goods found that they could not continue selling the old style of pads, hence that, in a measure, necessarily reduced the force and as in our case, ultimately discontinued entirely the manufacture of sweat pads.

X-*Q.* 28. As to the pads without the spring hooks, has not the change taken place because the pads could be bought cheaper than the houses could afford to make them?

A. Yes, in view of the present small demand of such pads.

X-*Q.* 29. And as to the pads with spring hooks, you do not feel at liberty to manufacture them in view of the patents on them, is this correct?

A. It is.

RE-DIRECT EXAMINATION.

Q. 30. Had not the manufacture of sweat pads passed entirely from the retail harness makers into the hands of the jobbers and wholesale houses, prior to the commencement of the manufacture of McClain?

A. To a very large extent.

ISAAC MEYER.

H. H. MILLER.

Q. 1. State your name, age, residence and business?

A. H. H. Miller, harness maker; age, 26 years; residence, West Unity, Williams County, Ohio.

Q. 2. State whether you handle or sell sweat pads; if so, what kind or kinds?

A. The "Success" for one, and the "Ohio" is the other one.

Q. 3. How does the pad you call "Success" compare with defendant's Exhibit "McClain's Present Attachment" now shown to you?

A. This looks like it.

Q. 4. The pad you call the "Ohio" pad, how is it attached to the collar, if at all?

A. It just fits over the neck and the collar lays on top of it.

Q. 5. How long have you dealt in the "Success" pad?

A. About two or three years, I should say. I can not tell exactly; since I first knew of them.

Q. 6. Since you commenced to handle them, has there been any increase in the demand for them, and about how great has this increase been?

A. We sell more of them every year, but I couldn't tell how many more.

Q. 7. About what is the ratio or proportion between your sales of the "Success" pad and your sales of the "Ohio" pad?

A. I sell about two of the "Success" to one of the other.

Q. 8. At what prices respectively do you sell these pads?

A. At at dollar and a half a pair for the "Success" pad, and a dollar and a quarter a pair for the "Ohio" pad.

Q. 9. What has been the effect upon the market for pads by the introduction of the "Success" pad?

A. The market for "Success" pads has been good.

Q. 10. When did you commence to sell the "Ohio" pad?

A. We handled it all the time we have this other.

Q. 11. Are you familiar with the construction of tie pads and strap and buckle pads?

A. I have seen them, but have never sold any of them.

Q. 12. State, if you know, whether or not the "Success" pad has to any extent superceded those modes of fastening, and to what extent?

A. It has superceded it in our country.

Q. 13. What is the defect in, or objection to, the tie string and strap and buckle methods of attaching pads to collars, which makes them inferior to the "Success pad"?

A. They don't hold them to their place as well.

Q. 14. Is this "Ohio" pad of which you speak as good a pad as the "Success" pad, without reference to the hook attachment on the "Success."

A. I think it is.

Counsel for defendant states that he objects to the testimony of this witness, and of all other witnesses that may be called, so far as it relates to the increase of sales of sweat colars of the complainant's make, or the decrease of the sales of sweat collars of other makes, and so far as it relates to any of the matters, which formed the subject matters of the twenty-seven or twenty-eight witnesses called by the complainant during the month of March, 1887, as being cumulative and an unreasonable accumulation of evidence, and notifies complainant's counsel, that whatever may be the result of the litigation, defendants will ask that the cost of taking this and similar depositions, as above, be taxed against complainant. This objection is meant to be general, and to apply to other witnesses without repetition.

CROSS-EXAMINATION.

X-*Q.* 15. Did you begin to sell the "Ohio" sweat collars at the same time as the "Success," or before that time?

A. About the same time.

X-*Q.* 16. Who manufactures the "Ohio" sweat collar?

A. I don't know. I am informed it is made by the E. L. McClain Manufacturing Co.

X-*Q.* 17. The same company that manufactures the "Success" that you are selling?

A. Yes, sir.

X-*Q.* 18. You have spoken of an increase in the demand for the "Success" sweat colars, has there not also been an increase in the demand for the "Ohio" sweat collar?

A. I sell more of the "Success," than I do of the other.

X-*Q.* 19. Do you not sell more of the "Ohio" sweat collars now, than you did at the beginning?

A. I suppose there are more of any kind sold now, than at first.

X-*Q.* 20. Then there has been an increase in your sales of the "Ohio" sweat collars has there not?

A. I suppose there has been since I first commenced to sell them, there has been a few more.

X-*Q.* 21. Has there not in reality been in your business about the same ratio of increase in the sales of "Ohio" sweat collars as in the sales of the "Success?"

A. No, sir.

X-*Q.* 22. Who do you buy both kinds from?

A. Lyttle and Wieman.

X-Q. 23. Do you not buy about the same number of the one kind as of the other?

A. I do not.

X-*Q.* 24. Have you examined your books to ascertain about the relative difference of your purchases?

A. No, sir.

X-*Q.* 25. You say you have seen sweat collars that were attached to the collars in use by string or straps and buckles?

A. Yes, sir.

X-Q. 26. Were these strap and buckle or tie string sweat pads, as large as this one before you marked "McClain's Present Attachment?"

A. I think they are.

X-Q. 27. Were they made in one or two pieces?

A. I have seen them both ways.

X-Q. 28. Were they made of the same material as this one before you?

A. I think so.

X-Q. 29. You never used them or sold them, as I understand, is this correct?

A. Yes, sir.

X-Q. 30. About how many dozen "Success" sweat collars did you sell, say, during the year 1886?

A. I couldn't tell, I never thought anything about it.

X-Q. 31. This McClain "Present Attachment" represents the only kind which you have sold, does it not?

A. Yes, sir; it looks like the only kind I have sold.

X-Q. 32. Did you ever sell any in which the spring was riveted rigidly to the sweat collar?

A. Not any that I remember of.

RE-EXAMINATION.

Q. 33. You have stated that the defect of the tie string and strap and buckle was that the pad so attached would slide or slip on to the collar, where did you get this information, or how do you know it?

A. I have heard people say so who have used them.

RE-CROSS EXAMINATION.

X-Q. 34. How many persons did you ever hear make that statement?

A. I never counted them.

X-Q. 35. If the sweat collar was made just like this one before you marked "McClain Present Attachment" and then attached to the collar by straps and buckles with proper tightness and the hames then buckled down over the straps, pressing them into the hollow of the collar, as would be the case, do you think they would not remain properly in their place in use?

A. Not as well as this pad.

X-*Q.* 36. Why?

A. I think this spring would hold it better.

X-*Q.* 37. That is all the reasons you have to suggest?

A. Yes.

H. H. MILLER.

W. R. BRAMWELL.

Q. 1. State your name, age, place of residence and occupation?

A. W. R. Bramwell; age, thirty; place of residence, 118 Indiana Avenue, Toledo: occupation, buyer for Lyttle & Wieman, dealers in carriage and saddlery hardware in Toledo.

Q. 2. Does your house deal in sweat pads for horse collars? If so, state the different pads that they deal in?

A. We do. We handle the "Success" and the "X."

Q. 3. Who manufactures each of these pads?

A. E. L. McClain Manufacturing Company of Cincinnati.

Q. 4. This "X" pad is the one called the "Ohio" pad by the previous witness, H. H. Miller, is it not?

A. It is.

Q. 5. How long have you been dealing in the "Success" pad?

A. About three years and a half.

Q. 6. Please state as nearly as you can what your sales have been each of these years; first, of the "Success" pad; and second, of the "X," and any other pads that you may have sold during that time which did not have metallic grasping hooks?

A. Our sales for 1884 of the "Success" were one hundred and nine dozen; in 1885, one hundred and fifty-seven dozen of the "Success;" in 1886, two hundred and two dozen. I don't know the exact sales for 1887 up to date; I know the receipts and I know about what we have on hand. Our receipts up to the first of June will have been one hundred and ninety-two dozen, of which we will probably have on hand at that date twelve dozen. The amount of pads without hooks I can not tell for the years

1884 and 1885. In 1886 we sold ninety-six dozen of the "X" sweat without hooks; in 1887 we have probably sold up to the present date forty dozen. We will probably have twenty dozen on hand the first of June as near as I can tell.

Q. 7. For the years '84 and '85 what is your best recollection as to the amount of "X" sweats or pads without hooks sold by your house?

A. That I don't know; but I think that our sales in '84 and '85 of the pads without hooks were considerable larger than they were in '86 and '87.

Q. 8. Well, then, if I understand correctly your testimony, it is that while the pads with the hooks kept increasing in popularity or the amount of sales, the pads without the hooks decreased in these particulars. Am I right or not?

A. You are right.

Q. 9. Without reference to the hooks, is there any difference in the values (workmanship and material) of these pads?

A. There is not.

Q. 10. At what prices respectively do you sell the "X" pad and the "Success?"

A. Five dollars per dozen and six fifty per dozen.

Q. 11. What then is the reason, if you know, that the "Success" pad so far surpasses the "X" pad in the demand for it, notwithstanding this difference in price?

A. From the fact that it has superior advantages.

Q. 12. State these superior advantages more explicitly, if you please?

A. The whole thing consists in the fastening by a hook.

Q. 13. What has the effect been upon the market for sweat pads, so far as you have observed, of the introduction of this metallic grasping hook?

A. Our experience has been that it has revolutionized the market. That the "Success" sweat is rapidly taking the place of all other cheaper and inferior sweats.

Q. 14. Did your house ever manufacture, or have specially manufactured for them, sweat pads? If so, state what kinds were so manufactured by or for you; and when, if ever, you ceased so to manufacture?

A. We have had sweat pads manufactured for us. For some years prior to 1886 the pad manufactured for us was the same in substance as the "X" sweat. We ceased manufacturing them in the fall of 1885, I think.

Q. 15. For how many years prior to 1885 did you have these pads manufactured for you?

A. Three or four, I think.

Q. 16. Why did you cease to manufacture them?

A. Because we could do better.

Q. 17. How was the demand for them affected by the introduction of the "Success" pad, if at all?

A. The trade on the common sweat commenced to drop off immediately after the introduction of the "Success."

Q. 18. Well, how far had it dropped off; or, how much demand for them remained in the fall of 1885, when you ceased to manufacture them?

A. In the beginning of the season 1886, we had, of course a small demand for common sweats, and the sales for the year taken respectively will show the increase of the "Success" over the common. The sales for the year of the "Success" were two hundred and two dozen; for the "X" sweat, ninety six dozen.

Q. 19. Suppose that you should cease to keep or handle a sweat pad with a grasping hook, substantially like that on the "Success" pad; what would be the effect in your judgment upon your trade in sweat pads, assuming that your competitors were handling pads with the metallic grasping hook?

A. My judgment would be that it would be demoralizing on our trade in pads.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 20. You already sell a good many of the "X" sweat pads, if you ceased to sell the "Success" pad, would there not be an increase in your sales of the "X" pads assuming of course that you continued to offer them for sale through your traveling men and in the other ways now employed by you?

A. I don't think there would be, for this reason, that the pads are of an entirely different character, and it would be almost an impossibility to sell a customer the "X" sweat, where he has

handled the "Success" sweat; that is to say, to substitute the "X" sweat for the "Success."

X-*Q.* 21. In what way are the "Success" and the "X" pad different in character, as stated by you in your last answer aside from the spring hooks?

A. In no way. The spring hook constitutes the difference in character.

X-*Q.* 22. Do not the "X" pads slip over the horse's head when they are applied for use?

A. I believe they do.

X-*Q.* 23. Do they not in this respect differ from the "Success?"

A. They do.

X *Q.* 24. I understand the "X" pad is what has been termed here this afternoon the "Ohio" pad. They are the same, are they not?

A. Yes, sir.

X-*Q.* 25. The "Success" pad which is open at the bottom and which does not therefore inclose the horse's throat in use can be used on horses which differ greatly in the size of their necks can it not?

A. You have to have different sizes of "Success" sweats to fit different horses.

X-*Q.* 26. In use, are they not taken from one horse and put onto another, notwithstanding there is a considerable difference in the size of the horses' necks and is not this permitted from the fact that they are open at the bottom, so that they are self adjusting, so to speak?

A. As to that I cannot say, but I presume there are some people foolish enough to put an eighteen inch sweat on a twenty-two inch horse.

X-*Q.* 27. Could they do this with the "X" sweat pad, which is closed at both top and bottom, and so invariable in size?

A. I think they could, and accomplish about as much good in one case as in the other.

X-*Q.* 28. Don't you think the horse would be choked with the "X" pad in such a case as we have been talking about?

A. Yes; I think it would be rather tight for him.

X-*Q.* 29. In reference to these common pads which you had made before dealing in the "Success" and "X" pads, were they

closed at top and bottom also, so as to be inserted over the horse's head?

A. I believe they were.

X-*Q.* 30. You say that it was better for you to buy and sell the McClain sweat pads than to continue having what you have termed the common pads manufactured. In what way was it better for your house?

A. In regard to the "X" sweat we got a great deal better sweat pad for about the same or a little less money.

X-*Q.* 31. Were not the sweat pads, both the "Success" and "X" pads, introduced by McClain, better in quality, etc., than any which were in the market or in use at the time he began to manufacture?

A. They were better than anything that we had had.

X-*Q.* 32. Were they not better than anything that you knew of in the way of sweat pads?

A. They were better than anything that I knew of.

X-*Q.* 33. Is not your house acting as one of the agents of McClain in the sale of his pads?

A. It is.

X-*Q.* 34. You find it more profitable to sell his "Success" pads than to manufacture and sell one of your own, do you not?

A. We can not manufacture one of our own with hooks.

X-*Q.* 35. Even if you could, would your facilities enable you to compete with one who was manufacturing sweat pads exclusively and on a large scale?

A. They would not.

X-*Q.* 36. Did you ever sell sweat pads, that were attached to the collar by straps and buckles?

A. We did not.

W. R. BRAMWELL.

Q. 1. State you name, age, residence and occupation?

A. My name is Hiram Herrick, age, 66, occupation harness-maker and saddler, residence, Toledo, Ohio.

Q. 2. Do you manufacture or sell sweat pads for horse collars, and how long is it since you first commenced to manufacture them?

A. Yes, sir. Since I first commenced to manufacture sweat pads, it is forty years. I don't manufacture them now, I sell them.

Q. 3. What kind of sweat pads do you sell, and how long have you been engaged in selling such pads?

A. It is the "Success." I think it is about three years, since I bought them first.

Q. 4. When did you cease to manufacture sweat pads?

A. A year ago.

Q. 5. Was your manufacture of sweat pads continuous from the time you commenced to manufacture them, until about a year ago?

A. Yes, sir.

Q. 6. Why did you cease to manufacture sweat pads?

A. One reason is, because that hook being on these "Success" pads, I couldn't sell my own without that hook.

Q. 7. How were the pads that you made, secured to the collars? State all the modes of attaching them, that were used in reference to your pads?

A. They were tied in by strings and they were sewed in, I might have put on straps and buckles, but I don't recollect. It just occurs to my mind now how I used to put them on by a strap and buckle. I used to make a little chape for the buckle, about two inches long and rivet it to the sweat collar; the strap or billet was riveted on the other edge of the sweat collar. In use the strap was brought around the horse collar and held by the buckle, the hames passing over the strap.

Q. 8. Of these three modes of fastening to wit strap and buckle, tie strings and sewing to the collar which was the best mode and which was generally preferred by the users?

A. Well, the strings were taken on account of cheapness. I should consider that was the best mode.

Q. 9. What was the objection or defect in the tie string method that was obviated by the use of the hook?

A. The hook is so easily adjusted to the collar and so quickly done, our customers took that altogether. The objection to the tie string was that they were too cumbersome and took too long and that they tore and ripped off.

Q. 10. Was there any objection to tie string and buckle and strap methods on account of the pad slipping when in use from under the collar?

A. Yes, sir.

Q. 11. Was this objection taken as much to the buckle and strap method as to the tie string method?

A. Sometimes they have brought in the tie string collar and have had buckles and straps put on because they would not turn so easily under the collar.

Q. 12. Did they ever bring in buckle and strap pads to have them fixed with tie strings or have them sewed in?

A. They have had them sewed in, but never to tie in.

Q. 13. Why did they bring them in to have them sewed in?

A. Because the sewing in was permanent; because they would not slip up or down, or move out of their place.

Q. 14. Was it generally understood by the users of those pads at that time that sewing in was the only way in which the pad could be kept from slipping up or down or moving around?

A. That was the only way we had at that time of doing it.

Q. 15. Did you have any class of customers then who used a considerable number of these pads and insisted upon having all their pads sewed in?

A. Yes. sir.

Q. 16. What has been the effect, so far as you have observed, upon the pad trade of the introduction of this metallic grasping hook upon pads?

A. The fact of it is that that hook has taken the place of all others. That is, so far as my trade is concerned, I mean that that hook and pad has taken the place of all other pads.

Q. 17. You have stated that the introduction of this grasping hook pad was the means of stopping your manufacture of pads, is this true of other harness makers so far as you have observed or not?

A. It is.

Q. 18. Suppose you were to hang at your door four pads all equal in workmanship and material, one of them to be the "Success" pad with the hook, the second to be a similar pad with strap and buckle, the third to be a similar pad with tie strings, the fourth to be closed at top and bottom and to be held by the pressure of the collar, how many of the three last kinds together could you sell while you were selling one hundred of the hook pad?

A. It would be doubtful in my mind if I could sell one. They have become so universal here that they won't have anything else than the hook pad.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 19. Were those sweat collars which you used to sell with tie strings and with strap and buckle made in one piece like the "Success" pad or in two pieces, one for each side of the horse's neck?

A. They were made both ways. They were made mostly in one piece.

X-*Q.* 20. How did they compare in size with the "Success" pads?

A. They were about the same.

X-*Q.* 21. What kind of material were they covered with?

A. The same kind of material as the "Success." Drilling.

X-*Q.* 22. Were they not covered with some kind of glazed cloth?

A. Some of them we used to make, the upper part was covered with glazed cloth and the under part with drilling.

X-Q. 23. Was not that generally the way that you made those pads which were made with tie strings or straps and buckles?

A. No, not the general way. About five years ago we did away with this glazed cloth altogether.

X-*Q.* 24. Prior to five years ago you generally used glazed cloth did you not?

A. Yes, sir.

X-*Q.* 25. After you began to use drilling, did not the sweat collars which were tied or fastened with straps and buckles remain in place better than when you used this glazed cloth?

A. I think they did a little.

X-*Q.* 26. When the sweat collar was properly strapped in place and the hames paoperly buckled down pressing the straps into the crease of the collar, could the sweat collar slip out of place?

A. It can. I will tell you the reason why. If they buckle the hame so tight, tight enough to hold it, it would press the collar so much as to make it too tight for the horse's neck. I have several times gone out to adjust collars that they had strapped up in that way to get them to fit the horses. There is difference in collars, some of them are weaker in the rim than others and when they are weak in the rim they will squeeze in as I have described.

X-*Q.* 27. Were not the McClain sweat collars, provided with the spring hooks, of a better quality etc. than any that you had known in the market prior to their introduction?

A. I think they were.

X-*Q.* 28. Are you not able to sell the McClain sweat collars at a greater profit than to make sweat collars yourself?

A. I could make a greater profit on collars I could make myself, but I can't sell them.

X-*Q.* 29. You sell some sweat collars that are not provided with spring hooks. You could make those kind to supply whatever demand you may have for them, why do you buy them already made?

A. I have never bought but about a dozen of that kind in my life.

RE-EXAMINATION.

Q. 30. You have stated in effect that the McClain pads with the hooks on, were made of better material than any other pads that you had theretofore known, I desire to ask you if you know whether there is any better material or workmanship in the McClain pads with hooks than in the McClain pads without hooks?

A. What I understood that answer to be was the material in the hook and not in the pad.

Q. 31. Does Mr. McClain use any better material or workmanship without reference to the hooks now, than other manufacturers of good pads who had preceded him?

A. I think the "Success" pad is rather the best material.

Q. 32. Did you ever see any pads manufactured by McClain & Anderson or the E. L. McClain Manufacturing Co. that did not have hooks on?

A. No.

H. HERRICK.

WILLIAM H. CRAY.

Q. 1. State your name, age, place of residence and occupation and of what house are you a member?

A. William H. Cray, Toledo, Ohio, age 46, dealer in carriage and saddlery hardware, and a member of the firm of Cray and Rood.

Q. 2. Does your house deal in sweat pads for horse collars?

A. It does.

Q. 3. How long have you dealt in them?

A. Twenty years.

Q. 4. Do you deal in the McClain pad with the metallic grasping hook known as the "Success?"

A. We do.

Q. 5. How long have you dealt in them?

A. Three years.

Q. 6. During these three years has your trade in this pad increased, and about what has been the rate per annum of increase?

A. Well, it has increased; from the first to the second year it has fully doubled. I can't say as to the third year, as I haven't given much attention to the saddlery trade this year.

Q. 7. What has been the effect upon the demand for pads without hooks of the introduction of the "Success" pad?

A. It has been largely decreased.

Q. 8. Did you ever manufacture, or have manufactured for you, sweat pads; if so, about when did you commence such manufacture, and when did you cease?

A. We did about four years ago. We ceased to manufacture them about three years ago.

Q. 9. Pads that you have handled prior to the introduction of the "Success" pad, whether of your own manufacture or otherwise, how were they generally secured to the collar?

A. They were secured in various ways: by tying, stitching on, or by straps and buckles.

Q. 10. What was the general objection to the tying on or attaching by straps and buckles, so far as you know?

A. The objection was the inconvenience in part, and in many cases they did not stay in their places as well. The pad has been changed some in shape in late years, not only of the "Success," but of other pads.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 11. If the old style sweat pads had been made of the same size and shape as the "Success," and attached to the collars by straps and buckles with proper care, in your opinion would they not remain in place in use as well as the "Success?"

A. I think not quite as well.

X-*Q.* 12. Are not the "Success" pads, aside from their spring hooks, of better quality, etc., than the sweat pads which were on the market at the time of their introduction?

A. They are.

X-*Q.* 13. Is it not more profitable for your house to sell them than to sell old kinds of sweat pads, taking the profit per dozen or per hundred?

A. It is.

X-*Q.* 14. Can ordinary houses doing a general business like your own compete in sweat pads with a house that makes their manufacture its exclusive business, so far as prices, etc., are concerned?

A. I don't quite comprehend that. Do you mean we as manufacturers or dealers?

X-*Q.* 15. I mean does it pay you to manufacture them in competition with such a house?

A. I don't think it does, At the same time we have not manufactured them of late, so do not know the cost of them.

X-*Q.* 16. Your house is selling the McClain pads under an agreement with him regulating prices, etc., is it not?

A. We are.

X-*Q.* 17. You understand that all the jobbers selling the McClain pads are selling under a similar agreement, do you not?

A. I do.

X-*Q.* 18. Before the introduction of the McClain pads did the jobbers throughout the country have any combination or arrangement by which the prices of sweat collars were regulated and maintained?

A. Not to my knowledge.

RE-EXAMINATION BY MR. MOORE.

Q. 19. Do you handle or are you familiar with the McClain pads without the metallic grasping hooks?

A. I never bought any of them; I have not seen them.

Q. 20. Are pads sold now since the introduction of the McClain manufacture at a higher or lower price for similar qualities than prior to the introduction of the McClain manufacture?

A. I think they are sold lower.

W. H. CRAY.

GEORGE H. SCOTT.

Q. 1. State your name, age, residence and occupation?

A. George H. Scott; age, thirty; business, harness maker, at 114 St. Clair Street, Toledo, Ohio.

Q. 2. Do you sell or make sweat pads for collars?

A. I do both.

Q. 3. Do you deal in the "Success" pad, and how long have you dealt in it?

A. I have dealt in the "Success" pad for a little over three years.

Q. 4. Has the demand for that pad increased during that time, and at about what rate per annum?

A. It has increased, and at about the rate of doubling the amount of each previous year.

Q. 5. How has it been during these three years with other pads that you handle that have no grasping hooks? Has the demand for that increased or diminished?

A. It has diminished. As the other increased, that has diminished.

Q. 6. You have stated that you manufacture pads. Do you mean that you make them for your own trade, or for the trade of jobbers and harness makers?

A. I mean that I make them for my own trade.

Q. 7. How long have you been manufacturing pads?

A. I have manufactured sweat pads for ten or twelve years, but have only been in business for myself a little over three years.

Q. 8. Did you manufacture sweat pads for yourself before you commenced to handle the "Success" pad?

A. I did.

Q. 9. Can you state about the number you made during the first year you were in business, and about the number you made last year? What I want is an approximate estimate as to how these numbers will compare.

A. It would be difficult to state the number; but in comparison I would state that I made fully six times as many the first year as I did last year.

Q. 10. Why is it that the "Success" pad is increasing in demand from year to year while your own manufacture decreases similarly?

A. I can give no other reason than that it is the way it is attached to the collar, held in place.

Q. 11. How are those of your own manufacture attached to the collar?

A. Some are put on by a strap and buckle, some tied on with strings around the collar, and occasionally sewed in through the collar.

Q. 12. If there was any general objection to the strap and buckle and tie string methods of attaching the pad to the collar, what was it?

A. The objection to both these methods is that they do not keep the sweat pad in place. There is the bother of the strings or straps coming off, and they don't make a very good looking job.

Q. 13. Please examine sweat pad now shown to you, especially with reference to metallic grasping hooks, said pad being marked "Complainant's Exhibit Defendant's Manufacture," and state whether you have ever sold such pads, and about how many?

A. I have sold, I think, one dozen of them.

Q. 14. Where your customers come and ask for a "Success" pad, is there any difficulty in selling that for the "Success" pad?

A. Not much difficulty.

Q. 15. Do the hooks attached to those pads (Defendant's Manufacture I mean) have sufficient spring power or elasticity for their convenient manipulation in attaching them to and detaching them from the collar, and in keeping them in place upon the collar? What has been the experience of yourself and customers in this regard?

A. My experience has been that they have.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 16. What do you mean by saying the hooks on this exhibit (Defendant's Manufacture) have elasticity?

A. I mean to say that they have spring enough to hold them on the collar.

X-*Q.* 17. Look at the hooks on that exhibit before you and see if they have any spring or elasticity whatever?

A. I have looked at those springs and think they have spring.

X-*Q.* 18. Is it not the softness in the roll of the collar that enables them to be put on?

A. I don't think it is altogether.

X-*Q.* 19. How much elasticity do these springs have?

A. That is a pretty difficult question to answer. It depends how much strain you put on them.

X-*Q.* 20. State how much you can open them and have them fly back to their original position?

A. I should suppose a quarter of an inch. That is something I cannot say. I have never tried how much I can spring them and see if they will come back.

X-*Q.* 21. Well, please try it with your hand now and then tell us?

A. I know that I have sprung it, but I can't tell how much.

X-*Q.* 22. Since you sprung it open a moment ago isn't it wider open than it was before?

A. Yes, sir.

X-*Q.* 23. Then it did not come back to its original position?

A. No, sir, it did not.

X-*Q.* 24. Do you know any kind of wire that would make a hook more rigid and with less elasticity that the wire in the hook which you have just been testing?

Complainant's counsel objects to this question, but only because it does not appear that the witness knows what kind of wire is used in making the hook in question.

A. Harness makers are not supposed to be judges of wire.

X-*Q.* 25. Did you ever know one of these hooks to be broken in two?

A. Not as I remember of.

X-*Q.* 26. You have explained that the kind of sweat collars which you formerly manufactured have been going out of use since the introduction of the McClain sweat collars. State whether the McClain sweat collars are not better in quality, etc., than the old style?

A. Well, they possibly might be.

X-*Q.* 27. Did you notice Mr. Moore take up the sweat collar (Defendant's Manufacture) a moment ago, and squeeze the hook that you had tested back into its original position?

A. I saw him take up the sweat collar and compare the two hooks, but did not see him squeeze it back to its original position.

X-*Q.* 28. You are selling the McClain sweat collars almost exclusively, I believe?

A. Almost, but not altogether.

X-*Q.* 29. Do you not find it more profitable per dozen or hundred to sell the McClain collar than any that you can manufacture?

I find it more profitable for this reason because the trade demands it, not because there is a bigger profit in them.

X.*Q.* 30. I ask you if you don't make more by a sale of a dozen of the McClain sweat collars than by the sale of a dozen of your own?

A. I don't think I do.

X-*Q.* 31. Did you ever figure on it?

A. Yes, sir.

RE-EXAMINATION BY MR. MOORE.

Q. 32. Please examine the hook on Defendants Manufacture that you opened by pulling out and state whether or not it is in the state it was when you pulled it out or whether it has been closed since you last had it in your hands by complainants counsel?

A. It would be pretty hard to state whether it has or not. It looks as though it had been closed some, since I last had it in my hands.

Q. 33. In pressing open that hook in response to the question of defendant's counsel, didn't you exercise vastly more strength or power than would have been necessary to have sprung the hook over the roll of the collar?

A. I rather guess I did.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 34. Are not the rims of collars over which the hooks are placed made of different sizess?

A. They are.

X-*Q.* 35. How much do they vary in size from the smallest to the largest?

A. That is a pretty hard thing to tell. I can give you an idea. My impression is that they would vary from a quarter to half an inch on collars that sweat collars are used on.

GEORGE H. SCOTT.

PETER SATTLER.

Q. 1. State your name, age, place of residence and occupation?

A. Peter Sattler; age, thirty-one next August; residence, 139 Oliver street; occupation, harness business, 113 St. Clair street, Toledo, Ohio.

Q. 2. Do you sell sweat pads for horse collars, and how long have you been engaged in selling them?

A. Yes; ten years.

Q. 3. Did you ever manufacture any?

A. Yes, sir.

Q. 4. Do you still manufacture sweat pads, or when did you quit?

A. No; six years ago I quit.

Q. 5. Why did you cease to manufacture them?

A. I could buy them cheaper than I could make them.

Q. 6. What kind of sweat pads do you sell now?

A. At present I have McClain's and Ortmayer's.

Q. 7. How long have you been selling those pads?

A. About two years.

Q. 8. Has the demand for a hook pad increased, and about how rapidly since you have been handling them?

A. We sell hook pads altogether now.

Q. 9. Do you mean that there is no demand for any other kind?

A. Well, no; we could sell them if we had them, but we don't keep them.

Q. 10. About how many of the "Ortmayer" pads have you bought and sold altogether?

A. About five or six dozen.

Q. 11. Which is the more profitable to sell, the "Ortmayer" pad or the "Success" pad?

A. The "Ortmayer," because we buy them cheaper and sell them at the same price.

Q. 12. When a customer comes into your store and asks for a "Success" pad or a hook pad, have you any difficulty in inducing them to take the "Ortmayer" pad?

A. No, sir.

Q. 13. Are customers generally able to distinguish between these hooks, or have you ever known a customer that did distinguish between them?

A. No; I haven't sold enough of them as yet to know.

Q. 14. But as far as your experience has gone you have been enabled when you desired so to do to supply any demand for a "Success" or hook pad with an "Ortmayer" pad, haven't you?

A. Yes.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 15. I believe you are a practical harness maker, are you not?

A. That is what people say.

X-*Q.* 16. How much do the rims of horse collars over which the hooks of sweat collars are put differ in size?

A. Such as sweat collars are used on from one-eighth to half an inch.

X-*Q.* 17. How long since you first began to sell "Ortmayer" sweat collar?

A. About a year ago.

X-*Q.* 18. Have you ever known an "Ortmayer" pad to break in two?

A. No.

X-*Q.* 19. Did you ever see one broken?

A. Yes, sir; Mr. McClain broke one yesterday.

X-*Q.* 20. When you made sweat collars that were attached to the collars by straps and buckles was there any objection to them in use?

A. Well, no. I have sold very few. I moved a year ago last February, and since that time I have sold three or four times as many collars as I used to.

X-*Q.* 21. Did you ever have to do anything to the "Ortmayer" hooks to fit them to the different sized rims of the collars on which they were to be used?

A. Yes; take a large rimmed collar; I have had to drive them on with a hammer.

X-*Q.* 22. Why was that?

A. The hook is made so stiff and the rim so large I could not get them on otherwise.

X-*Q.* 23. Did you ever have to do that with the McClain hooks?

A. Never.

X-*Q.* 24. Did you ever find cases where the rim of the collar was too small for the "Ortmayer" hooks to fit them snugly?

A. No.

X-*Q.* 25. Did you ever hear any objection made by your customers against the "Ortmayer" hook?

No; I haven't sold enough of them yet.

RE-DIRECT EXAMINATION BY MR. MOORE.

Q. 26. How much was the diameter of this rim that you say you hammered an Ortmayer hook over greater than the smallest rim that you ever put an Ortmayer hook on?

A. About three-eighths of an inch more.

Q. 27. Mr. Ortmayer, now present, visited you and had a talk with you about these matters to-day or yesterday, didn't he?

A. Yes, sir.

Q. 28. During that conversation Mr. Ortmayer told you that the Ortmayer hooks didn't have any spring, didn't he?

A. Well, there was a sweat collar laying on the counter with a broken hook, and we talked about those hooks not springing, and I was so busy that that was all.

RE-CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 29. State whether Mr. Ortmayer told you anything or called your attention to any feature about his hooks that you had not already learned for yourself?

A. No, sir.

X-*Q.* 30. Do you not buy other things of Ortmayer besides sweat collars?

A. Yes, sir; we just got ninety-six dollar's worth about ten days ago.

X-*Q.* 31. Did not Mr. McClain also visit you and talk with you about the subject matter of this controversy before calling you as a witness?

A. Yes, sir.

X-*Q.* 32. Was there anything said or done by Mr. Ortmayer that in your opinion was calculated to influence you or induce you to state anything that was not exactly in accordance with the facts?

A. No; Mr. Ortmayer came in my place; I never saw him before. He introduced himself; I asked him what was the matter with the sweat collar men; I was called to fit a collar on a horse; when I came in, we spoke about that broken hook on the sweat collar; my attention was again called and he left then.

PETER SATTLER.

Q. 1. State your name, age, residence and occupation?

A. Name, Ernest Blackmore, age, 29, residence 47 Jerome St., Toledo, Ohio, occupation, harness maker.

Q. 2. How long have you been carrying on the harness business for yourself?

Q. I started in the business in '82, with my brother, and continued the business in partnership until a year ago last fall, and since then I have been continuing the business myself.

Q. 3. Do you manufacture or sell sweat pads for horse collars, and what kinds do you sell?

A. I only manufacture when there is a special order for a deer's hair sweat collar. I have handled nearly every kind of sweat collar that I ever saw.

Q. 4. What sweat collar do you handle the most of at the present time?

A. The "Success."

Q. 5. How long have you, whether alone or in partnership with your brother, been handling the "Success?"

A. I should judge about three years.

Q. 6. State how if at all your sales of the "Success" have increased from the time you commenced to handle it to the present time?

A. I think I have doubled my sales on the "Success."

Q. 7. What has been the rule with reference to pads without hooks, have your sales of them increased or diminished, and about how much?

A. The sales have diminished and in fact I don't buy anything else, when I can get the size desired in hook pads.

Q. 8. What is it that makes this "Success" pad in greater demand than any other?

A. It is the mode of fastening to the collar.

Q. 9. What, if any, experience have you had in the sale or use of pads secured to the collar by buckle and strap or tie string?

A. Well, those are the old ways that were used for fastening and were successful until some way better was found for fastening.

Q. 10. What if any objection to the use of those modes was generally taken so long as you have known of them?

A. The greatest objection was so much trouble to put on and take off, and there was no stability to the fastening.

Q. 11. What do you mean by want of stability?

A. The leather used for such purpose was generally of inferior quality and what we call belly stock.

Q. 12 Did the pads thus fastened have such tendency to slip up and down or from under the horse collar, as to be a subject of general complaint?

A. They did because the leather used in fastening, either in string or strap and buckle was so spongy that it would draw out of shape and stretch so that the collar could not be kept in its place without slipping.

Q. 13. If an effort were made to use leather for string and strap and buckle of such thickness as would be safe against stretching, would it not interfere with the buckling down of the hames?

A. I think it certainly would.

Q. 14. Please examine "Complainants Exhibit Defendants Manufacture" and state whether you are familiar with pads like that, and state also the circumstances of your first seeing such a pad and what you there said about it?

A. I am familiar with them. I think the first time I saw that pad was in the store of Cray and Rood, the traveling agent was there at the time with his sample trunk, and exhibiting that collar. The salesman's name he was showing it to was Jones. I then made the remark to Jones that I thought it was close on to the "Success" and that it was an infringement. I remember that circumstance well.

Q. 15. Have you dealt in these pads since that time?

A. I couldn't answer as to that definitely.

Q. 16. Have you since that time dealt in a pad having a wire hook on such as is shown in the said exhibit before you and marked "A. Ortmayer & Son.?"

A. I don't remember I might have handled it, but I can't recall the circumstance of buying them. If I have handled them it was because I could not get the "Success."

Q. 17. But as a matter of fact, did you not buy and sell some of these pads although you may not recollect the circumstances of buying them?

A. Well, I couldn't say as to that, I would like to recall the circumstance before I would be positive of handling that pad. I

am quite sure that I sold some of the pads, but don't recall the circumstances of buying them.

Q. 18. In selling these pads would customers generally or not who were accustomed to a hook pad assume that this pad was the "Success" pad?

A. I don't think that they would question it if told so.

Q. 19. This hook has sufficient spring, or has it, for convenient manipulation in putting it on the rim of a collar and in keeping its place?

A. I should think it had, yes, sir.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 20. Just look at these "Ortmayer" hooks and state whether, as a matter of fact, they have in your opinion any spring or elasticity, whatever as compared with the "McClain Present Attachment" which I also show you?

A. I will acknowledge that this (Present Attachment) has more spring, but this (Ortmayer hook) must have some spring.

X-*Q.* 21. Why do you say it must have some?

A. It must have some in order to go over the rim of the collar to fit the collar.

X-*Q.* 22. Is not that "Ortmayer" hook about as rigid as it is possible to make it, in your judgment?

A. I don't think that it would be wise to make it stiffer than it is, or it would not answer the purpose it was designed for.

X-*Q.* 23. Would it not be pretty difficult to make it any stiffer than it is?

Objected to for that it does not appear that the witness who is a harness maker, has any knowledge about the manipulation of springs, or the different kinds of metal.

A. To make it any stiffer than it is, is out of the line of my business. It certainly could be made stiffer in my estimation.

X-*Q.* 24. Out of wire?

A. That I couldn't answer.

X-*Q.* 25. Will you swear positively that you ever sold a single "Ortmayer" sweat collar like that one before you?

A. I will not.

X-*Q.* 26. How much does the rim or fore roll of collars over which the hooks of sweat collars are placed, differ in size or diameter?

A. About one inch I should say.

X-*Q.* 37. How long have you been a practical harness maker engaged in your business?

A. Ten years.

ERNEST BLACKMORE.

A. M. POTTER.

Q. 1. State your name, age, residence and business?

A. My name is A. M. Potter; my age is forty-two; my residence, Plymouth, Michigan; my occupation, harness maker.

Q. 2. Do you deal in sweat pads, and what kinds have you dealt in for the past four years; and if so, state to what extent and how long?

A. Yes; I have handled the "Success," "M," and the common sweat pads.

Q. 3. Have you found the demand for the "Success" pad to have increased while you have handled it; and if so, about how much has it increased per annum?

A. Yes; it is a good seller, and my sales have more than doubled since I began to handle it.

Q. 4. During the same time have your sales of the "M" pad and the common pad increased or diminished?

A. They have diminished.

Q. 5. How much have they diminished?

A. Largely.

Q. 6. Where you have a demand now for a dozen "Success" pads, how many of the other kinds together will be demanded?

A. About fifty per cent difference.

Q. 7. Do you mean by fifty per cent difference that you would sell two of the "Success" to one of the other kinds?

A. Yes, sir.

Q. 8. State what kind of pad the "M" pad is; that is, how it is attached to the collar?

A. The "M" pad is made whole—joined at both ends. Its shape holds it to the collar; it slips over the horse's head.

Q. 9. Have you ever had any requests from parties who were using the "M" pad to stitch them into the collars in order to avoid their disposition to slip?

A. Yes, sir.

Q. 10. What is it upon the "Success" pad that has given it its popularity and created the demand for it?

A. I should think it was the device for holding it to the rim of the collar.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 11. How were the common pads that you dealt in before the introduction of the McClain pads fastened to the collar?

A. Sewed in.

X-*Q.* 12. Did you ever sell any that were fastened to the collar by straps and buckles?

A. I have.

X-*Q.* 13. Did not these pads that were held to the collar by straps and buckles do everything that the "Success" pad does after they were in place and fastened to the collar, so far as protecting the horse, etc., is concerned?

A. I don't know any reason why they would not.

X-*Q.* 14. Are not the "Success" pads of a better quality, etc., than the common pads which were in use before their introduction?

A. I don't think so.

A. M. POTTER.

JOHN MCCORMICK.

Q. 1. State your name, age, residence and occupation.

A. My name is John McCormick, my age is 40, my residence Port Huron, Michigan, my occupation, harness manufacturer.

Q. 2. Do yon handle sweat pads, and if so state what kinds you have handled during the last four years?

A. The common sweat pad, the "M" sweat pad and the "Success." The last five or six years, I can't state exactly.

Q. 3. How has the demand been for that during this time, (I mean the "Success.") Has it increased and about at what ratio per annum?

A. It has increased about one-half per annum.

Q. 4. During the period last stated, has the demand for your other pads increased or diminished and about in what ratio?

A. The common pad has decreased while the "M" pad has increased. The common has decreased 200 per cent. since the "Success" came in, and the "M" I should say had increased about 100 per cent.

Q. 5. What wes the cause of the decrease of the common pad and the increase of the "M" pad?

A. The cost to the consumer is but a trifle difference between the "M" and the common pad. The "M," not being fast to the collar, when sweated can be taken in and dried. The common pad is sewed to the collar.

Q. 6. How does the price to the consumer of the "M" pad and the "Success" pad compare?

A. The "Success" costs fifty per cent more than the "M" pad.

Q. 7. What is the most popular pad in the market, and what is the cause of its popularity?

A. The "Success," on account of the hook that fastens it to the collar.

Q. 8. Have you had any experience with, or opportunities of observation of pads attached to the collar by buckle and strap and tie strings; and if you have, state what if there be any general objection to those modes of fastening?

A. I have. To the straps and buckles, they do not hold the pad solid to the collar, but allow it to move and work out of place. As to the tie string, I generally sew it in with a waxed thread, which holds it perfectly fast.

Q. 9. How is it about the "M" pad, which I understand has no device for fastening to the collar; do they slip?

A. I don't think they do.

Q. 10. Please explain, if you can, why this "M" pad does not slip under the collar, while all other modes of fastening prior to the "Success" hook pad permit slip except where they were stitched to the collar?

A. They being made any size will fit any sized collar, and being fast at top and bottom are intended to fit a horse's neck, which holds them in place if the collar fits the horse. I refer to the "M" pads.

Q. 11. Does not the closing of a collar at the bottom and neatly fitting the horse's neck, as in the case of the "M" pad, so compress the windpipe of the horse as to interfere with his free breathing; or have you had your attention called to this subject?

A. It has. Where the collar is small, or fits the horse close, the "M" pad can not be used.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 12. Is not the "Success" pad, aside from the hooks, of superior quality, workmanship, etc., than the common pads which were in use at the time of its introduction?

A. It is.

X-*Q.* 13. Is there not a greater profit to you per dozen in selling the "Success" pad over selling other kinds?

A. Yes; there is more profit in them.

X-*Q.* 14. Is not the object of using a sweat collar to remedy defects in the fit of the collar, and would not sweat collars be unnecessary if the regular collars were properly fitted to the horse's neck?

A. Sometimes they are used to make the collar fit the horse, but I find customers even when having new collars fitted will have the pads put in.

X-Q. 15. But in your judgment would not sweat collars be unnecessary if the regular collars were properly fitted to the horse's neck?

A. If the collars are properly made and fit the horse, I think sweat pads are unnecessary.

RE-DIRECT EXAMINATION.

Q. 16. You have stated that there was more profit in selling the "Success" pad than in selling other pads. Do you mean to limit this comparison to common pads? Was it also true of the "M" pad?

A. There is more profit per dozen in the "Success" than any other pad made.

Q. 17. Is there any greater percentage say per $100 of pads sold in the "Success" over the other kinds?

A. No.

Q. 18. Is there as much profit per $100 in "Success" as there is in selling other pads?

A. No. First, we can not get the "Success;" next, they cost more, so the customers prefer something cheaper.

Q. 19. Where the sweat collar is attached to the regular collar by straps and buckles, will it slip out of place if properly strapped around the collar, and the hames then strapped tightly down upon the strap, as they must be in use?

A. It is not liable to, if it is strapped properly.

JOHN McCORMICK.

JAMES D. HULL.

Q. 1. State your name, age, residence, occupation, and with what house you are connected?

A. James D. Hull, forty-seven years, Buffalo, clerk Pratt & Letchworth, manager of one of the departments of their business.

Q. 2. Does your house deal in sweat pads for horse collars, and for how many years has it dealt?

A. Yes; I presume we have sold sweat pads for thirty-five or forty years.

Q. 3. Do you at present deal in the "Success" sweat pad, and for how long have you dealt in them?

A. Yes; about four years.

Q. 4. Has your business in that pad during this period of time increased or otherwise, and at about what rate per annum has the demand for this pad increased?

A. It has increased. The first year which we sold the "Success" pad was not very large; the next year the sale increased perhaps 800 or 1000 per cent; each succeeding year the increase has been perhaps 50 per cent upon each preceding year.

Q. 5. How has it been with reference to pads that you dealt in prior to the introduction of the "Success;" has the demand for them during this period increased or decreased?

A. The sale of all other pads for that period has diminished in inverse ratio. It commenced to drop off in about the same proportion and in about the same way as the "Success" pad has increased.

Q. 6. To what do you attribute this great increase in the sale of the "Success," and consequent decrease in the sale of other pads?

A. The attention which has been given to the better care of horses, and the advertising which has been done by the manufacturer of the "Success," together with the fact of superior construction and adaptability to the place. Many causes might be assigned, either of which or all would have a bearing upon the increased sale.

Q. 7. To what feature of the "Success" pad do you refer when you speak of superior construction and adaptability?

A. Ease of method of attachment to collar and greater attention being paid to form that they should adjust themselves upon the draught of the horse's shoulder. Those features not being a part of the sweat pad formerly constructed.

Q. 8. Have you dealt in the McClain pad known as the "Double XX," which is a pad closed at the top and bottom, and not provided with the metallic grasping hooks; and do you deal in them now?

A. We have and do.

Q. 9. What is the ratio of your sales of the "Double XX" pad as compared with the "Success" at the present time?

A. I can't answer that question except by approximation. I presume we would sell $90 worth of "Success" sweats while we were selling $10 worth of "Double XX."

Q. 10. Is it or not the fact that this "Double XX" pad has received the same amount of advertising as the "Success" pad?

A. I should presume not. The fact that there was a hook attachment to the "Success," which was novel, attracted attention to the "Success" pad.

Q. 11. You do not exactly understand my question. I do not refer to that kind of advertising that the "Success" pad may

have done for itself by its novelty or merit. I refer only to the efforts of the manufacturers, and I would ask you whether Mr. McClain has not given equal prominence in his advertisements to this "Double XX" pad as to the "Success" pad?

A. I should judge not. The reason why I think so arises from the fact that the word "Success" is so largely used in his correspondence, letter heads, bill heads, envelopes etc., while in their price lists, catalogues and other regular advertising matter the various pads he manufactured seemed to have equal prominence.

Q. 12. But these various advertisements referred to by you, do not reach the user of the pad, and I presume the traveling salesmen of your house and other similar houses, show both pads to the retail dealer would you say under these circumstances that the applying of the word "Success" as it is applied by these manufacturers plays any considerable part in the greater popularity of the hook pad over the "double XX?"

A. I should presume it did.

Q. 13. Is not the "double xx" pad equally well made as regards labor, material and care as the "Success" pad?

A. So far as I know, yes.

Q. 14. You seem to place some stress upon the word "Success" as a factor in that pad having attained the popularity that it has. In order to get exactly at your meaning in that regard, I would ask you whether in your judgment or opinion, if the hooks had been left off the "Success" pad, the pad remaining exactly as it is, and attached to the collar by any of the modes known prior to the introduction of these metallic hooks, such as sewing it in or securing it thereto by tie strings, or buckles and straps, it would have attained to anything like the degree of popularity that it has attained?

A. I judge there is an amount of real merit in this manner of attaching the sweat to the collar, which had it received any other name than "Success," and the same methods used by the manufacturers for its introduction to the trade, it would have been equally successful.

Q. 15. Putting this in another form, suppose that exactly that pad had been manufactured by Mr. McClain and been introduced to the trade in exactly the way that the "Success" pad has

been introduced in every particular, but that the hooks had been omitted from it, and any other mode of attaching it to the collar, known before the introduction of the hooks, had been used, do you think it would have attained anything like the degree of popularity that it has attained with the metallic grasping hooks?

A. Perhaps not.

Q. 16. Did your house handle the "Success" pad when it had the hooks attached as shown in "Defendants Exhibit McClain Single Roll Spring?"

A. We did.

Q. 17. Was there any complaint as far as you know as to the operation of the spring when thus attached, or was it substantially as good as the present mode of attachment?

A. I do not recall any complaint.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 18. Does not your house sell the McClain pad as agent for McClain under agreement regulating prices etc?

A. It does.

X-*Q.* 19. Is it not a fact that salesmen are much more active in their efforts to sell the "Success" pad than any other kind, from the fact that they are able to represent it as something new, owing to its spring hooks?

A. I believe they are.

X-*Q.* 20. Is not the "Success" pad superior in its material, workmanship etc. to the common pads that were in the market before its introduction?

A. So far as the material used in the construction of the "Success" is concerned, it was no better nor as good in some respects as that which were sold prior to its introduction by ourselves; the form of the "Success" sweat and perhaps these hook attachments, as I have said before, had a very great influence upon its introduction.

X-*Q.* 21. Did you ever know a sweat pad that had anything like so many people interested in selling it as the "Success" pad has, owing to the general arrangement which McClain has throughout the country with the jobbers?

A. I do not.

X-*Q.* 22. Is it not more profitable to your house per dozen to sell the "Success" sweat pad than any other?

A. Yes, than any other we sell.

X-*Q.* 23. How were the common pads that you sold years ago attached to the collar?

A. By being stitched to the rim, or rather by being stitched to the groove between the rim and the belly of the collar.

X-*Q.* 24. Did you ever sell any which were attached by straps and buckles?

A. No, not that I know of.

X-*Q.* 25. Did you ever sell any, or see any sweat pads of the defendants manufacture?

A. We never sold any, and I don't remember of ever seeing any.

RE-DIRECT EXAMINATION.

Q. 26. What is the difference in your selling price per dozen between the "Success" and "Double XX" pads?

A. One dollar I think.

Q. 27. Then is there not a larger profit per dozen and a very much larger profit per cent in selling this "Double XX" over that of the "Success" to your house?

A. There is a somewhat better percentage of profit in the sale of the "Double XX." I am not sure about the profit per dozen.

Q. 28. Upon closer recollection do you not now pay $3.65 per doz. for the "Double XX," and with this suggestion to your memory I would ask you again if the profit per doz. is not larger upon the "Double XX" than upon the "Success," further reminding you that this pad that we have called "Double XX" is now called in McClain's catalogues and price list "X."

A. My recollection is that we have not enjoyed the price before mentioned, that is, my recollection is that we have paid more for them. If the present price is as stated, and we needed more of the pads it would certainly pay us a better profit per doz. than the "Success."

Q. 29. You have stated substantially that there were two improvements in the succees pad over that of pads previously made, the metallic grasping hooks, and the form of the pad, what

I desire to ask you is whether precisely that form of pad was not made, and well known years before the introduction of the "Success" pad, made in South Charleston O. and numerous other places?

A. My recollection is that the form of pads sold and used before the introduction of the "Success" differed materially from its form.

JAMES D. HULL.

JOHN MELVILLE.

Q. 1. State your name, age, residence, occupation, and with what firms you have been connected for the past ten years?

A. John Melville, forty years, 142 Niagara street, Buffalo; harness maker; formerly I was with J. S. Lytle & Son, Buffalo, N. Y., then I was in partnership and managing partner for W. E. Lock for two years; since then I have been in business for myself in Buffalo.

Q. 2. Have you been familiar during these years with sweat pads for horse collars? Have you made them and have you sold them?

A. I have.

Q. 3. Have you dealt in the sweat pad known as the "Success," manufactured by McClain & Anderson and McClain Company, and how long have you dealt in them?

A. Have dealt in them three years, but have been acquainted with them longer, having handled them when I was at Lytle's.

Q. 4. During the time that you have dealt in this pad have the sales of it increased, and about what rate per annum has this increase been?

A. It is increased for the last year I should say two-thirds.

Q. 5. You mean by this increase of two-thirds that where three were sold in 1885 five were sold in 1886?

A. Yes.

Q. 6. Your comparison has been limited, as I understand it, to the increase from 1885 to 1886. Can you also state whether

the demand for this pad increased and about at what rate from 1884 to 1885?

A. I don't think I could say that. The trade up at Lock's was very small for this line of business. I didn't observe it closely.

Q. 7. How were the pads that you were familiar with (made or sold) prior to the introduction of the "Success" pad attached to the horse collar?

A. I should say sewed in, or strapped on.

Q. 8. What has been the effect of the introduction of the "Success" pad upon your demand and the general demand, so far as you know, for these pads that were sewed in, or strapped on?

A. The "Success" is so much superior to the other pads that we use it entirely.

Q. 9. What feature of the "Success" pad is it that gives it this superiority over the other pads?

A. The clasp that goes on the collar rim, being so easily adjusted.

Q. 10. I want to get your opinion of the demand for this hook pad, and I will ask you to assume that you cease to deal in a pad having this metallic grasping hook, but kept in stock every other pad in the market, and, at the same time, your competing neighbors kept the grasping hook pads, what effect would this have upon your sales of pads?

A. I should say that I would lose a good deal of trade certainly.

Q. 11. That is, as I understand you, all or a majority of your customers now demand the hook pad, is that correct?

A. Yes,

Q. 12. Please examine "Defendants Exhibit McClain Single Roll Spring" and state whether you are familiar with that mode of attaching the grasping hook to the pad?

A. No, I haven't used any of them at all.

Q. 13. Were you not familiar with them two or three years ago and were they not handled by Lytle when you were with him?

A. To the best of my belief, yes.

Q. 14. Did you ever hear any complaints of them, of any character with reference to their operation when they were in use?

A. No.

Q. 15. Have you ever sold pads closed at both ends, and intended to pass over the horse's head.

A. Yes.

Q. 16. What is the general objection among intelligent farmers and teamsters to their use?

A. They will not keep their position on the horse's neck or under the collar and they are liable to choke the horse.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 17. In saying that you never heard any complaints about the use of this single roll spring, do you mean to be understood as saying that you were acquainted with the use of that kind of a spring?

A. No, I was in the workshop not in the store, and had nothing to with the selling. I couldn't form an opinion about that.

X-*Q.* 18. You do not know as a fact that the house ever sold that kind of a spring, do you?

A. Yes.

X-*Q.* 19. You will swear that they did sell that kind of a spring?

A. To the best of my knowledge I have seen them there, I wouldn't swear that I had.

X-*Q.* 20. Did you ever see a sweat collar of the same form and shape as the "Success" before its introduction, without reference to the matter of the hook?

A. That I couldn't say, it is too far back, I didn't pay much attention at that time.

X-*Q.* 21. When these sweat collars that used to be made were fastened to the horse collar by straps and buckles they answered every purpose and secured every result that the "Success" pad does, did they not? I am speaking of their use after they were strapped in place.

A. I should say not.

X-*Q.* 22. Why?

A. Because the previous pads always slipped under the collar: never kept their position.

X-*Q.* 23. How do you know they slipped?

A. I have put straps on old pads like the "Success" pads myself, and when used a few days would shift out of place.

X-*Q.* 24. In what way were they like the "Success" pad?

A. They were made of sheeting and stuffed and tufted.

X-*Q.* 25. Were they of the same shape in all respects as the "Success?"

A. So far as I can judge at the present time, yes.

X-*Q.* 26. Is not the "Success" pad of superior workmanship, etc., to the old style of pads that were in the market when they were introduced?

A. I should say yes.

X-*Q.* 27. Are you in the jobbing business?

A. No.

X-*Q.* 28. Do you buy your "Success" pads directly from McClain?

A. No.

X-*Q.* 29. Isn't there more money to you per dozen from the sale of the "Success" pads than from the sale of any other kind?

A. No.

X-*Q.* 30. When salesmen come to your house are they not much more active in their efforts to sell you "Success" pads than any other kind?

A. There is no salesman ever solicited me to buy any pads. I get them from a house here in Buffalo.

JOHN MELVILLE.

WM. C. PETERS.

Q. 1. State your name, age, residence, occupation, and of what firm you are a member?

A. Wm. C. Peters, twenty-four years, 678 Washington street, Buffalo; harness maker; C. A. Peters & Son.

Q. 2. How long have you been familiar with the business as man and boy?

A. About twenty years.

Q. 3. How long has your father and your firm been engaged in selling or in making sweat collars?

A. About twenty-one years.

Q. 4. At present do you deal in the "Success" pad, and how long have you dealt in them?

A. I handle them at present and handled them for about three or four years.

Q. 5. Prior to that time did you make your own pads. or did you deal in the manufactures of others?

A. I made my own.

Q. 6. How were those pads that you made attached to the collar?

A. Some were sewed in, others were put on with strings to tie, and some were put on with straps and buckles.

Q. 7. Since you commenced to deal in the "Success" pad, please state how rapidly, if at all, the demand for that pad has increased?

A. Double about every year.

Q. 8. You mean that every year since you have been handling it you sell about twice as many as you did the preceding year?

A. It has been so for the last three years and the prospects are good for it this year.

Q. 9. How has it been with reference to the other pads made by yourself; has the demand for them increased or diminished?

A. Diminished.

Q. 10. I want to know at about what rate this diminishing process has gone on; and in this connection you may state too out of a hundred pads that you now sell how many of them will be the "Success" pad?

A. For fifty pair of "Success" we sell about one pair of our own.

Q. 11. In other words, you would say, would you not, that the "Success" pad has practically superseded your own manufacture?

A. Yes.

Q. 12. What feature of the "Success" pad is it that has given it this popularity?

A. The hook.

Q. 13. I understand from your testimony that you have had familiarity with the buckle and strap and tie string methods of

securing the pad to the collar, and also with pads sewed at both ends and placed over the horse's head. What I desire to ask you is, what if any general objection to these several kinds existed, and that were remedied by the "Success" pad?

A. In the first place, those applied with straps and buckles and tie strings would never stay in their place; those sewed at both ends would wrinkle up and sometimes choke the horse.

Q. 14. Was or was not the pad sewed at both ends objected to for that it also slipped under the collar when in use?

A. It did slip.

Q. 15. Suppose that you were to-day to cease handling a pad with a metallic grasping hook, but to keep on hand every other kind of pad in the market, with all the old modes of attaching them to the collar previously referred to. I want your best judgment as to what effect this change would have upon your trade in pads?

A. I think it would greatly hurt my trade.

Q. 16. Are you occasionally visited by salesmen of jobbing houses and manufacturers, and solicited to buy pads?

A. I am.

Q. 17. Which do they make the greater effort to sell, the pads with the hooks or pads without the hooks?

A. Generally some outside pad, outside of the "Success."

Q. 18. Does it require, so far as you have observed, any drumming upon the part of the wholesale houses to induce harness makers to purchase the "Success," or does the difficulty consist in getting "Success" pads as fast as you can sell them?

A. A great many times we can't get them as fast as we can sell them. It does not require any drumming to induce harness makers to purchase the "Success."

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 19. These salesmen that tried to sell you pads outside of the "Success" were competitors of the "Success," were they not?

A. The handled both kinds of pads, "Success" and the other kinds.

X-*Q.* 20. Why did they try to get you to purchase the other kinds?

A. That is unbeknown to me.

X-*Q.* 21. Was it not because they happened at that time to be out of "Success?"

A. No; I am positive it wasn't, because I bought "Success" of them at the same time.

X-*Q.* 22. Were not the pads other than the "Success" pads of their own manufacture?

A. Some were and some were not.

X-*Q.* 23. How many times did a salesman make greater efforts to sell you pads other than the "Success?"

A. That is most too numerous to mention. I can't keep track of that.

X-*Q.* 24. What reasons did they give why you should pur- the other kind?

A. Some because they were cheaper in price, and some they claimed were better than the "Success."

X-*Q.* 25. What object or interest could they have in trying to sell you other kinds of pads than the "Success?"

A. I don't know.

X-*Q.* 26. Were not the "Success" pads better in workmanship, etc., than the pads which were in the market prior to their introduction?

A. I think so.

X-*Q.* 27. Did you ever see a pad just like the "Success" in shape before you saw the "Success?"

A. I did not.

X-*Q.* 28. Are you jobbers?

A. No.

X-*Q.* 29. Do you not realize a greater profit per dozen from the sale of the "Success" than from the sale of any other kind?

A. I don't at present, no.

X-*Q.* 30. Did you not for some time after their introduction?

A. I did.

X-Q. 31. If a pad is carefully strapped to the collar and then the hames carefully strapped down as they should be in use, so as to press the straps into the crease of the collar, do you think the pads would slip out of place?

Objected to as irrelevant because it pre-supposes a very careful man to be in connection with each pad so attached.

A. There is one man out of a hundred that would keep his hames strapped so as not to slip.

X-*Q.* 32. So that the pads would not slip?

A. Yes.

X-*Q.* 33. Why do you say that there is only one man in a hundred that would do this?

A. Well, because a man changes his harness from one horse to another, and doesn't use the proper care to tighten his hame straps at the top.

X-*Q.* 34. That is your opinion is it?

A. I know it to be a fact.

X-*Q.* 35. How do know it to be a fact?

A. Because I see it every day.

X-*Q.* 36. Before going on to the stand did you not have a talk with Mr. Moore about the sweat collar business?

A. I did.

RE-DIRECT EXAMINATION.

Q. 37. Is it or not the fact that at the only conversation that you had with Mr. Moore, and which occurred yesterday, that he asked you only and in about these terms, so far as this subject is concerned, "what if any objection have you found to exist with reference to the tie string and strap and buckle methods of attaching a pad to a collar;" and did you not answer as to that substantially if not literally, "they all slip under the collar, however they are fastened?"

A. I did; that was the question and that was my answer.

Q. 38. Are there not a number of manufacturers of pads now who make pads without hooks, and of exactly the same form and of about as good material and workmanship as the "Success," without reference to the hook?

A, I have seen one of the same shape, but not as good a quality and workmanship.

WM. C. PETERS.

Q. 1. State your name, age, residence and occupation?

A. George Losson, thirty-three years, 97 East Genessee Street, Buffalo, harness manufacturer.

Q. 2. Did you ever manufacture sweat pads for horse collars, and do you now?

A. Yes, sir.

Q. 3. How are they attached to the collar?

A. Sewed in with thread.

How long since you first began to manufacture and sell sweat pads?

A. Manufacture and selling now 11 years for myself.

Q. 5. Do you sell sweat pads having metallic grasping hooks for connecting with the collar and how long have you been engaged in selling such pads?

A. Sold them for the last year, with the metallic grasping hook.

Q. 6. Didn't you sell any with a metallic grasping hook before a year ago?

A. I think I sold "Success" three years ago.

Q. 7. What effect has the introduction to the market of these metallic grasping hook pads had upon the demand for your own pads that were sewed in?

A. We had to keep them in order to keep my own trade, they were preferred to my own sweat pads.

Q. 8. What proportion of your own pads now do you sell as compared with the grasping hook pad as sold by you?

A. I don't sell any but the grasping, and leather pad which I manufacture myself, I sell 6 doz. to 1 doz. of mine.

Q. 9. Has the demand for this grasping hook pad, increased from year to year since you have been handling it and about what has been the rate of increase?

A. It increased ½ gross over last year's sale.

Q. 10. Were you familiar with the operation of pads secured by strap and buckle and tie strings before the introduction of the metallic grasping hook pad?

A. No sir, never use anything but the leather sweats.

Q. 11. Then you don't know or do you whether there were any, and what general objection incident to the use of the strap and buckle and tie string methods of securing pads to the collar?

A. I don't know what the objections were.

Q. 12. Suppose that you were now to cease handling a pad with a metallic grasping hook, and were to keep in stock any or all other kinds, what effect in your opinion would this have upon your pad trade?

Objected to because it does not appear that the witness is acquainted with the selling qualities of all other sweat pads without spring hooks?

A. I would loose the trade or a great portion of it.

Q. 13. Do you or do you not know that among harness makers and teamsters it has been generally understood for years past that pads attached by strap and buckle or tie string, were objectionable because of the disposition of pads so attached to slip from under the collar when so in use?

Objected to as leading.

A. Yes, I know that.

Q. 14. Do you ever have agents of jobbers and manufacturers to call and solicit your trade in pads?

A. Yes, sir.

Q. 15. As a general rule which do they make the greatest effort to sell, the pads with hooks or pads without hooks?

A. The pad with a hook.

Q. 16. Do they ever offer to sell you pads without hooks?

A. Yes, sir.

Q. 17. Why do they make greater effort to sell you a pad with a hook, is it because it is harder work to sell you a pad with a hook?

A. Because they are a little cheaper.

Q. 18. I think you have misunderstood my question No. 15 and will put it again in another form; which would these agents rather sell, pads with hooks or pads without hooks?

Objected to because the question informs the witness that he has made a mistake and given an answer not desired, not satisfactory.

A. I never offered to buy anything else, and it stands to reason that they couldn't sell me anything else but the hook pad.

Q. 19. But have they offered to sell you the other kinds?

A. Yes, sir.

Q. 20. Have they tried to pursuade you to take the pads without hooks in place of the hook pads?

A. Yes.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 21. As a matter of fact don't the traveling salesmen recommend the pads with the spring hooks more than they do the others?

A. Yes.

X-*Q.* 22. Did you ever see pads on the market that were attached to the horse collars with straps and buckles?

A. Yes.

X-*Q.* 23. Did you ever sell them?

A. No, sir.

X-*Q.* 24. Did you ever fit them to the collar?

A. Yes.

X-*Q.* 25. When they are strapped to the collars and the hames strapped securely in place as they are in use, so that the straps on the sweat pads are pressed down into the crease of the collar, can they slip or move out of place?

A. Yes.

X-*Q.* 26. How can they?

A. The strap by getting wet, stretches and slips and you can't get them tight enough.

X-*Q.* 27. Isn't it a fact that after a sweat collar has been used a few days, it becomes so adapted to the shape of the horse collar as that it will remain in place of itself?

A. No, sir; it will never stick unless it has the hook to keep it in place.

X-*Q.* 28. Do you want to go on record as saying that is always the case?

A. It isn't always because you can sew or rivet it on the collar, but with the hooks it's handier, you can take it off and place it just where you want it.

X-*Q.* 29. Can't you take one off, that is fastened by straps and buckles also?

A. It can't be done too.

X-*Q.* 30. How were these that were fastened with straps and buckles made?

A. Some made of ticking, or cloth, or leather, or anything or zinc.

X-*Q.* 31. Were they made in one or two pieces?

A. They were made in one piece.

X-*Q.* 32. Did you ever see a sweat collar just the shape of the "Success" sweats before their introduction?

A. No, sir.

X-*Q.* 33. Is not the "Success" sweat collars superior in workmanship etc, to any which were on the market before its introduction?

A. Yes, sir; far superior.

X-*Q.* 34. In your opinion does not the "Success" sweat collar owe some of its popularity to its quality, workmanship, shape, etc.?

A. It is the best there is.

X-*Q.* 35. Then these things as well as the spring hooks serve to account for its supplanting all others, do they not?

A. Yes, they do.

X-*Q.* 36. Are you in the jobbing business?

A. No sir.

X-*Q.* 37. Do you not realize a greater profit per dozen from the sale of the "Success" pad than from the sale per doz. of any other kind?

A. I have another one I get better profit out of.

X-*Q.* 38. Which one is that?

A. A cloth pad manufactured by Wells, Hisley & Co. Syracuse N. Y.

X-*Q.* 39. Are they provided with hooks?

A. Yes, sir.

RE-DIRECT EXAMINATION.

Q. 40. How lonk have yon been handling the "Success" pad before you saw the Wells, Hisley & Co's pad?

A. Abont two years.

Q. 41. You have stated that the "Success pad differed in form from any that you ever saw before, now please state wherein it differs?

A. In the fastening of the hook.

Q. 42. Isn't the form of the pad without reference to the hook one you had been familiar with for many years prior to the introduction of the "Success."

A. They were of just that form except they were fastened below as well as at the top.

GEORGE LOSSON.

J. FRED. STEWART.

Q. 1. State your name, age, residence and occupation.

A. J. Fred. Stewart, 23 years, 43 15th st. Buffalo, Clerk with Harvey D. Blakesly.

Q. 2. In what business is this Blakesly house and how long have you been connected with it?

A. Saddlery hardware and horse clothing, six years nearly seven.

Q. 3. Does this house handle the "Success" pad?

A. Yes, it has been handling it about 4 years.

Q. 4. Prior to your handling that pad, did you handle similar pads and what kinds were they?

A. We handled the old fashioned sweat made in two pieces.

Q. 5. How are these attached to the collar?

A. Sewed on.

Q. 6. Will you please state how rapidly, if at all, the demand for the "Success" pad has increased as evidenced by your sales of them from year to year since you have been handling them?

A. They have increased very rapidly.

Q. 7. Please state if you can in exact figures your sales for the several years respectively since you have been handling them?

A. In 1883 bought $20.50 worth; in 1884, $828.74; in 1885, $2147.15; in 1886, $3459.55; in 1887 to date, $2837.

Q. 8. During these years has the demand for the pads that you handled before increased or diminished and about how many of them do you sell now?

A. Diminished, sell about two dozen pair a year.

Q. 9. Do you sell any other pad, other than the "Success" and this old-fashioned pad?

A. Yes, sir; what we call the Ruhl pad closed at top and bottom.

Q. 10. When did you commence to sell this Ruhl pad?

A. About 1883.

Q. 11. Please give us some idea of the demand for that whether it has increased or diminished and how much?

A. It increased quite rapidly at first and then it commenced to diminish. We don't sell a gross of them now a year.

Q. 12. In your opinion why is it that the "Success" pad has superseded the old-fashioned pad and to some extent, if not entirely, the Ruhl pad, that is, what if any feature of the "Success" pad is it that has accomplished this?

A. It's the hook.

Q. 13. I want your opinion as to how the demand for pads is influenced by these metallic grasping hooks, and I will ask you as to what would be the result upon your pad trade if you should now cease to handle a pad with these metallic grasping hooks, but in place thereof kept in stock any or all other kinds of pads made?

A. If we stopped selling these pads with the hook on I don't know why they should sell any better than the other.

Q. 14. But suppose you stopped selling any pad with these hooks on, and sold any pad you pleased without hooks, how would that affect your trade in pads?

A. Wouldn't sell as many pads.

Q. 15. Do you think you would sell ¼ as many without the hooks as with them?

A. Sell just about ¼ as many of all kinds put together.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 16. When traveling salesmen come to your house with pads to sell what kind do they generally recommend you to buy?

A. We are a jobbing house.

X-Q. 17. Does not your house sell the McClain pads under an agreement with him regulating prices etc.

A. Yes, I think we do.

X-*Q.* 18. Is not the "Success" pad superior in workmanship etc. to any pad that you was acquainted with before its introduction?

A. I don't know. I am not a judge of workmanship.

X-*Q.* 19. How many traveling salesmen does your house have who sell sweat collars?

A. Two.

X-*Q.* 20. What sweat collars are they instructed to mostly recommend retailers to purchase?

A. They are not instructed to sell any one particular kind.

X-*Q.* 21. Did you ever know a sweat collar of the same form as the "Success" before its introduction, leaving the hooks out of consideration?

A. No, sir; the "Success" is the first pad I ever saw opened at the bottom, made in that way.

X-*Q.* 22. Is there not more profit to your house per dozen from the sale of the "Success" than from the sale of any other sweat collar?

A. No, sir? they do not.

X-*Q.* 23. Is not their percentage of profit greater when they sell the "Success" than when they sell any others?

A. No, I think not.

J. FRED. STEWART.

JOHN C. LIGHTHOUSE.

Q. 1. State your name, age, residence and occupation?

A. John C. Lighthouse, forty-three, Rochester, N. Y., manufacturer horse collars and halters, and tanner.

Q. 2. Do you sell sweat pads for horse collars, and how long have you been dealing in them?

A. I do, and about two years and two or three months.

Q. 3. In what kind of sweat pads have you so dealt?

A. The "Perfection" and the "Success."

Q. 4. This "Perfection" pad is fastened together at top and bottom, pushed over the horse's head, and intended to keep its place by the pressure of the collar, is it not?

A. It is.

Q. 5. You will please state whether or not the demand for the "Success" pad has been increasing, and whether rapidly or not?

A. It has been increasing very rapidly with me.

Q. 6. In the same way, tell us whether the demand for this "Perfection" pad has been increasing or decreasing, and how rapidly?

A. It has been decreasing, and rapidly: so much so, that I am scarcely selling it with me.

Q. 7. Did you at any time in your life (and if so, state when) have experience of pads secured to the collar by strap and buckle or tie strings?

A. Yes, sir; both when I was an apprentice and journeyman, some twenty-five years ago; have had none recently.

Q. 8. If there was any objection generally taken to those modes of securing pads to collars, please state what that objection was?

A. The pads would slip around on the collar, and would not stay in place.

Q. 9. Did you have any experience at that time of the users of these pads coming to the harness shop where you were employed, and having straps, buckles and tie strings removed, and the pad sewed into the collar?

A. I have.

Q. 10. Without asking you to strain your recollection as to numbers, please state whether this was an ordinary or uncommon occurence?

A. It was ordinary.

Q. 11. You say that you deal among other things in halters. Is this a patented specialty?

A. I manufacture halters. They are patented and are a specialty in the United States, Canada and England.

Q. 12. Have you observed the advertising done by McClain & Anderson and E. L. McClain Manufacturing Company of their sweat pads in the trade journals and their catalogues?

A. I have.

Q. 13. Assuming this to be all the advertising they do (except what is incident to ordinary business correspondence), I would ask you, first, whether in your judgment, the amount of their advertising is extraordinary in view of the fact that the "Success" pad is a patented specialty; and second, I would ask you how the amount of their advertising compares with the amount of advertising that you do with your patented halter?

A. First, I think it is. Second, I don't think they advertise as much as mine, because they run to trade journals and catalogues; whereas mine is a catalogue, about five thousand newspapers, large lithograph show cards, small lithograph show cards, together with circulars, etc.

Q. 14. Well, considering the fact that your halter is a patented specialty, would this advertising be considered very remarkable in amount?

A. I think it would.

Q. 15. Is it your opinion that this large advertising would in any degree compensate for a commonplace article, or is the function of this advertising merely to call the consumers attention to the thing, so that they may judge of its inherent merits?

A. To the first question I should say no; to second question I should say yes, sir; and to make a demand.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 16. You are selling the McClain sweat collars as one of his agents under a contract fixing prices, etc., are you not?

A. I am selling the "Success" only under such a contract.

X-*Q.* 17. As you understand it, McClain has a similar arrangement with most of the jobbers throughout the country, has he not?

A. I think he has.

X-*Q.* 18. And these jobbers have their traveling men visiting thousands of harness men and retailers throughout the country, offering to sell them among other things, "Success" pads. Do you not so understand it?

A. I think they do.

X-*Q.* 19. And do you not also understand that a great many of these jobbers have circulars and catalogues for the trade, in which the "Success" pad is advertised among other things?

A. I have never seen any.

X-*Q.* 20. In view of the advertisements which McClain has sent out, and of the arrangement which he has with the jobbing houses, and of the number of men which the jobbing houses have upon the road selling "Success" pads, I will ask you whether you have ever known of any other sweat pad which has received anything like the pushing on the market which the "Success" pad has received?

A. I have not.

X-*Q.* 21. Do you not think that the popularity and extensive use of the "Success" pads has been greatly owing to these things?

A. I presume it had something to do with it.

X-*Q.* 22. Have you had such advantages in the sale of your halter that you have been asked about?

A. I have.

X-*Q.* 23. You have an arrangement with the jobbing houses as McClain has with his pads?

A. I have no written contracts.

X-*Q.* 24. Then you do not have all the advantages that McClain has, do you?

A. I can't see where there is any advantage of having a contract.

X-*Q.* 25. Is not the "Success" pad superior in quality, etc., to the old style sweat collars that were in use before its introduction?

A. I think not.

X-*Q.* 26. Isn't it superior in workmanship?

A. I think not.

X-*Q.* 27. Before the introduction of the "Success" pad did you ever know of a sweat pad that was the same shape as the "Success?"

A. No.

X-*Q.* 28. Do you not realize a greater profit per dozen on the sale of the "Success" pads than from the sale of any other?

A. No.

X-*Q.* 29. You have said that the pads which were fastened by straps and buckles would slip under the collar. Were not those pads made of enameled cloth on the side next to the collar?

A. As a general thing they were.

X-*Q.* 30. In your opinion would a sweat collar of the shape of the "Success" and made of the same material slip, if it were strapped around the collar and the hames then properly fastened in place, as is done in use, so as to press the straps holding the sweat collar down into the crease in the horse collar?

A. It wouldn't be so apt to slip as tied over the top.

X-*Q.* 31. You are manufacturing sweat collars yourself, are you not?

A. No, sir.

X-*Q.* 32. Look at this McClain single roll spring, and state whether or not in your opinion the shank of this spring would not be apt to press in, and hurt the horse's shoulder?

Objected to as being new matter, and leading, irrelevant and immaterial.

A. I think not, unless it should work through.

X-*Q.* 33. How much does the roll on the horse collar around which the hooks on the sweat collars are clasped differ in diameter in the different collars on which sweat pads are used?

A. Every manufacturer has his own sizes. I have one myself; from the two extremes it would be about three-eights of an inch from my experience.

J. C. LIGHTHOUSE.

JACOB LUX.

Q. 1. What is your name, age, residence, occupation and how long have you been engaged in business for yourself?

A. Jacob Lux, sixty-one, Rochester, N. Y., harness maker; I have been engaged in business for myself since 1853.

Q. 2. How long have you been making and selling sweat pads for horse collars?

A. I have been making them since I have been in business and selling them.

Q. Do you sell the "Success" and for what length of time have you been selling it?

A. I sell the "Success." I have been selling them about three or four years, and I have never made a pair since those came out.

Q. 4. Did you manufacture extensively sweat pads before the "Success" was introduced?

A. Yes, sir.

Q. 5. Why did you cease to manufacture?

A. Because those are a better article to be used, I mean the "Success."

Q. 9. What feature or part of the "Success" pad is it that makes it better than those you make yourself.

A. The first is it is better for the horse's shoulder, fastens on easier, and satisfies the people better. This is it the hook attached to the pad to fasten it to the collar.

Q. 7. Apart from the hook was or was not your own pad as good as the "Success?"

A. No, sir; it was not and cannot be.

Q. 8. Suppose that you should now quit handling the hook pad, what effect would it have upon your pad trade?

A. Could not sell any.

Q. 9. Did you handle the "Success" pad when the hooks were riveted to the pad?

A. I did.

Q. 10. Was there any substantial difference so far as you know between that mode of attaching the hook and the present mode?

A. This attachment is better than the one we had before for the reason that we can work the spring to fasten to the collar.

Q. 11. Were there any complaints from your customers so far as you know about the hooks riveted to the pad?

A. Not much, my idea is that this is better so far as my experience goes.

Q. 12. Suppose that Mr. McClain had not introduced the swivel attachment at all, but kept on making them with the rivet attachment, would the pads have been as popular as they are?

A. It would go if we didn't know anything about this, but this is an improvement upon it.

Q. 13. Has your trade in "Success" increased from year to year and at about what rate?

A. Yes, certainly I sell more, I sometimes could sell more if I had them.

Q. 14. When you made pads, which was your preferred mode of having them attached to the collars, and which was preferred by your customers?

A. The string attachment.

Q. 15. Was that preferred by your customers to sewing them in and why?

A. We sewed more in than tying in. It kept them more stationary.

Q. 15. What was the chief objection to tying them in, and to securing them in by buckle and strap?

A. There was no fault found with that, until your new patent came out, and that knocked it all endways.

Q. 17. What I mean is this, was it objected usually, that pads put on by tie strings, or buckle and strap would slip around under the collar when in use?

A. Certainly.

Q. 18. Is the close top sweat collar like the "Success" as good as the open top sweat collars, such as used to be made?

A. For my taste, I prefer the open top, some people prefer the close top, because they do not understand the matter, I presume one is as good as the other.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 19. Do you not make more profit on the sale of a dozen "Success" pads than on the sale of a dozen of any other kind?

I certainly make more than on any other kind, because there are no other sold, I make more on a dozen of the "Success" than I made on a dozen of the kind I made.

X-*Q.* 20. When salesmen came here to sell you pads, what kind do they most recommend you to buy?

A. No salesmen come here to sell to me.

X-*Q.* 21. If a sweat collar is attached by strap and buckle passing around the horse collar and the hames are then buckled

properly in place so as to press the strap down into the crease in the collar, do you think the sweat collar would slip out of place?

A. I do not, without the hame moves.

X-*Q.* 22. How much does the fore roll on horse collars with which sweat pads are used, differ in diameter?

A. They will differ a quarter of an inch easy enough.

X-*Q.* 23. Don't they differ more than that?

A. Yes, in heavy team harness, the difference is greater.

X-*Q.* Than a quarter of an inch?

A. I could'nt tell exactly without measuring.

X-*Q.* You spoke about rims that were two inches, and rims that were five inches, did you mean around them before they were sewed on the collars?

A. Yes, sir; sometimes six inches. These would be the width of the leather before the collar was made.

RE-DIRECT EXAMINATION.

Q. 26. You speak of a collar rim made of two inches width of leather, is not that a buggy collar upon which no pads are used?

A. Yes, sir.

Q. If Mr. John C. Lighthouse of your city should make a statement as to the different diameters of rims of collars upon which sweat pads are used, wouldn't you say the accuracy of his statement was beyond question?

A. Yes, sir. This statement is all right as a practical man in the business would know.

JACOB LUX.

FREDERICK MANN.

Q. 1. What is your name, age, residence and occupation.

A. My name is Frederick Mann, my age, thirty-seven years; residence, 183 Bronson Ave. Rochester N. Y. and occupation harness making.

Q. 2. Do you deal in sweat pads and if so, in what kinds?

A. Yes, sir; in "Success" sweat pads also sweat pads of our own manufacture.

Q. 3. These sweat pads of your own manufacture describe them generally and how they are secured to the collar?

A. They are secured by waxed ends sewed into the collar. They are in two pieces.

Q. 4. Is the demand for this pad increasing, or diminishing, so far as you have observed?

A. It is diminishing with us.

Q. 5. How is it about the "Success" pad, is the demand for it increasing or diminishing?

A. Increasing.

Q. 6. At about what rate is this increase per annum?

A. I should think about 25 per cent.

Q. 7. Which do you make the most money on, per pad, or per dozen pads, your own manufacture or the "Success" pad?

A. Our own manufacture we make the most on.

Q. 8. When people generally come in to buy pads, what do they ask for?

A. They ask for sweats and we show them what we have got. The "Success" is satisfactory.

Q. 9. More particularly what I mean is, do purchasers of the "Success" pad ask for the "Success" pad, or do they ask for a hook pad, or in any other way indicate the precise kind they want?

A. The only way I can answer that is, they want the hook pad.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 10. Do travelling salesmen come to your place to sell you pads and other things?

A. Not pads, they do other things.

X-*Q.* 11. Who do you buy your pads of?

A. S. V. Roby.

X-*Q.* 12. What kind of pads do you most recommend to purchasers?

A. I don't recommend any, I let them buy what they see.

X-*Q.* 13. I mean when they come in and do not call for any special kind, what do you recommend in such cases?

A. We generally ask them what they want.

X-*Q.* 14. Are not the "Success" pads superior in workmanship etc. to the old pads, which were in the market before their introduction?

A. I think they are as good as was ever made, whether they are superior to others I don't know.

X-*Q.* 15. Aren't they better than the old ones used to be? I am not speaking of the hook.

A. That I can't say. I don't know what you call the old ones. I don't think they are any better, not for durability.

X-*Q.* 16. I want to know if the "Success pads, aside from the hooks are not better than any pads which you know of, before they were introduced?

A. In some ways they are.

X-*Q.* 17. You are a practical harness maker. I believe?

A. I am.

FREDERICK MANN.

AUSTIN S. BROOKS.

Q. 1. What is your name, age, residence and occupation?

A. Austin S. Brooks, age, forty-eight; Rochester, N. Y.; occupation, harness maker.

Q. 2. How long have you been in business for yourself, and before that, by whom and how were you employed?

A. In business here in Rochester for two years. I was employed as foreman in harness manufactory before that.

Q. 3. Since you have been in business for yourself, have you sold "Success" pads and if so, what kinds?

A. I sold "Success" pads like McClain's Single Roll Spring Defendants Exhibit, I also sold other kinds before that.

Q. 4. What kind of pads have you ever sold, other than the "Success" pad?

A. I have sold the common sheep-skin pads, and the pads that are closed top and bottom.

Q. 4. Which pad now is mostly in demand?

A. The "Success" pad.

Q. 6. Did you ever sell any "Success" pads having the hook attached, as in Defendants Exhibit McClain's Present Attachment?

A. Yes.

Q. 7. When and how many?

A. That was last fall and about half a dozen pairs or twelve such pads.

Q. 8. How many have you sold altogether of the "Success" with the hook riveted as shown in "McClain's Single Roll Spring?"

A. Thirty pairs or sixty such pads.

Q. 9. State exactly when you went into business and why it is that you sold such a small number of these "Success" pads?

A. I said two years, but it isn't exactly two years. I went into business on the fifteenth of March, 1886, I haven't been in business here long enough, I took a shop here all run down and being a stranger here, I haven't had the customers.

Q. 10. How did your customers like the "Success" pad with the hook riveted on?

A. They liked it the best of any in the market and wanted no other.

Q. 11. When people come into your store to buy pads, what do they ask for, state it in the language they generally use?

A. They ask if we have the sweat pads closed at the top with the steel slasps that hook on the rim.

Q. 12. Is a sweat collar closed at the top any better, as a general rule, than one open at the top?

A. Yes; it is.

Q. 13. Does it not necessitate the using of a larger collar?

A. It does; one inch and a half larger.

Q. 14. Well, isn't this a disadvantage?

A. It is a disadvantage in one way. It is so in light collars that we cover, because it makes light collars so heavy and bungling. It is an advantage in some, because it prevents the neck from getting sore. (The top of the neck.)

Q. 15. It is only in case that the horse is specially tender upon the top of the neck that it is advantageous to use a pad closed at the top?

A. That is all.

Q. 16. What was the general objection, if any, to the old style method of securing a pad to the collar by buckle and strap or tie strings?

A. Simply because they wore out too soon where tied to the hames, and that would be no objection if we had had these hooks upon them.

Q. 17. But was there any other objection or inconvenience incident to the use of pads secured by tie strings or buckles and straps to the collar?

A. Not that I ever heard of, and that they were too bungling.

Q. 18. Did you ever know or hear that when secured in this way that the pad would slip around under the collar?

A. Oh! yes. I had to fix two yesterday to keep them from slipping around, and I have another to fix yet.

Q. 19. Is there anything new to you in the shape of this "Success" pad other than the hooks?

A. No; not that I know of.

Q. 20. How many years is it since you became familiar with that shaped pad and secured them to collars by the old method?

A. Six years ago; perhaps seven.

Q. 21. Is it only six or seven years ago since you first sewed in pads to collars like this "Success" pad without the hook?

A. It couldn't be farther back than 1879.

Q. 22. How many years ago was it since you first sewed a pad closed at the top into a collar?

A. In 1860.

Q. 23. What was the difference in shape between those pads that you sewed in in 1860 and the "Success" pads?

A. Much narrower at the top, and a heavy swell on the draft, seam came on the under side, and it was a better shaped pad and better for the horse.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 24. Before the "Success" pad had you ever seen a sweat pad attached to the collars by spring hooks?

A. I did not.

X-*Q.* 25. Had you ever seen a pad just the shape of the "Success" pad, not considering the hooks?

A. Yes; pads I have seen like this in 1879 or 1880.

X-*Q.* 26. Was not the "Success" pad superior in workmanship, etc., to any pad that was in the market at the time it was introduced?

A. Most assuredly it is.

X-*Q.* 27. Do traveling salesmen come to your place to sell you sweat pads among other things?

A. Yes.

X-*Q.* 28. What kind of sweat pads do they most recommend you to buy?

A. They speak well of the pad they happen to represent.

X-*Q.* 29. Take the salesmen who are selling McClain's pad; which kind of McClain pad do they most recommend you to buy?

A. The "Success" always.

X-*Q.* 30. How were those pads which parties brought to you a few days age to change, on account of their slipping, attached to the collar?

A. By leather and steel; the leather passing around the rim and the steel under the hame.

X-*Q.* 31. Does not the steel also partly embrace the rim of the collar?

A. No; it don't in my opinion.

X-*Q.* 32. There was no strap and buckle going around the collar with those sweat pads, was there?

A. No.

X-*Q.* 33. Did you ever see sweat pads attached to the horse collars by straps and buckles passing around the collar and under the hames?

A. Yes; have put them on.

X-*Q.* 34. Would not those sweat pads remain in place all right when they were properly strapped on and the hames buckled down in place, pressing the straps into the crease in the horse collar?

A. Yes; always.

X-*Q.* 35. Is it not more profitable to you per dozen to sell the "Success" pads than any other?

A. It is not; there is more profit in other pads.

AUSTIN S. BROOKS.

Q. 1. State your name, age, residence and occupation?

A. Andrew Ferguson; age, thirty; residence, Rochester, N. Y.; occupation, harness maker.

Q. 2. Do you deal in sweat pads for horse collars? How long have you dealt in them and what kinds?

A. I deal in sweat pads, and have for three years and six months, in the "Success" and the common sweat pads.

Q. 3. Have your sales since you commenced to handle the "Success" increased or diminished, and about how much per annum?

A. They have increased. I don't know how to answer that matter "per annum."

Q. 4. How would your sales at present in a year compare with the first year that you handled the "Success?"

A. I could safely say they are twice as large now as they were then.

Q. 5. Have your sales of the common pad during the same period of time increased or diminished?

A. I don't believe they have either. I can't say they have increased or that they have diminished.

Q. 6. While you are now selling one hundred "Success" pads about how many of the common pads do you think you would sell, judging by your recent experience?

A. Perhaps a dozen.

Q. 7. Which is the greater profit upon: one "Success" pad or one common pad, as you sell them?

A. I think the "Success" if I get the regular price, though sometimes I don't get my regular price.

Q. 8. Did you handle the "Success" pads when the grasping hooks were riveted on?

A. Yes, sir.

Q. 9. Were there any complaints from your customers about those pads and hooks?

A. I don't remember as there have been.

Q. 10. When customers come into your store now to buy sweat pads, do they ask for "Success" pads, or for pads with hooks on? Please state in their general language, what they say?

A. I keep them where they can see them; they look at them, and tell me they want one of those pads.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 11. When traveling salesmem, who sell different kinds of pads, made by McClain come to your place, what kind do they most recommend you to buy?

A. As I deal altogether with Mr. Roby of this city, I have no traveling salesmen to come to me.

X-Q. 12. Is not the "Success" pad aside from the hooks, superior in workmanship etc., to the old style of pads, which were in the market when they were introduced?

A. I think they are.

ANDREW FERGUSON.

ADAM P. BROWN.

Q. 1. State your name, age, residence and occupation?

A. Adam P. Brown, age, thirty-six years old; Syracuse, commercial traveler, selling saddlery on the road.

Q. 2. For what house or firm do you travel?

A. For the house of Jacob Brown.

Q. 3. How long have you been so employed in that house.

A. Seventeen years.

Q. 3. Does that house deal in sweat pads for horse collars and how long have they been dealing in them?

A. Yes, we have kept common sweat pads for ten or twelve years probably.

Q. 4. Do you handle the "Success" pad and about how long have you handled them?

A. Yes. About four years.

Q. 6. At about what rate has your trade increased if at all per annum in this "Success" pad since you commenced to handle it?

A. About 50 per cent. per annum.

Q. 7. What has been the effect of the introduction of the "Success" pad upon your trade in common pads.

A. I should think they drove them out. We cannot sell the common pads any longer.

Q. 8. What feature of the "Success" pad is it which has thus popularized them and driven out the common pads?

A. The hook on the sweats.

Q. 9. What do the retail trade ask for when you meet them that is, do they ask for the hook for the "Success" pad or how do they generally designate what they desire?

A. They ask for the "Success" pad as a general thing occasionally they ask for a cheaper sweat.

Q. 10. I want your opinion based upon your observation of the demands of the trade. Suppose you or the representative of any other similar house should refuse to sell a pad with substantially this hook on, what effect would that have on your or such persons trade in pads?

A. It would decrease our trade if we did not sell the "Success" sweat.

Q. 11. But suppose that you ceased to sell any pad having this hook or substantially this hook, would, or would not, that substantially destroy your pad trade?

A. Well, I should think it would.

Q. 12. You handled the "Success" pad when the hooks were riveted to the pad substantially as shown in "Defendants Exhibit McClain Single Roll Spring." Did you not?

A. Yes.

Q. 13. During the time that you sold pads with the hooks so attached, did you ever hear any complaint of that hook or its mode of attachment?

A. No.

Q. 14. Did your house sell pads made by complainant McClain that did not have the hooks—attached to the "Success" pad?

A. We sold sweats closed at top and bottom that did not have the hooks on. They did not come directly from McClain they came from the Cincinnati Saddlery Co. I think they were made by McClain.

Q. 15. Were not these last mentioned pads without reference to the hooks as well made as far as labor material etc. is concerned as the "Success" pad?

A. They were.

Q. 16. How did you succeed in selling them either as a substitute for the old common pad or for the "Success" pad, and is there any demand for them now?

A. Well, we didn't sell but very few of them, the trade all wanted the pad with the hook on.

Q. 17. Did McClain advertise these pads also in his catalogues?

A. He did.

CROSS-EXAMINATION.

X-*Q.* 18. Is it not a fact that McClain only recently began to advertize these pads without the hooks, while he has been advertising the ones with the hooks from the beginning, isn't that a fact?

A. Well no, I think he has been advertising both of them for two years at least.

X-*Q.* 19. Well, has he not been advertising the ones with the hooks much longer than that?

A. They have advertised the number 1 "Success" longer than that.

X-Q. 20. That was provided with Spring Hook, was it not?

A. Yes.

X-*Q.* 21. Is your house a jobbing house?

A. It is.

X-*Q.* 22. Are you not selling the McClain pads under a contract with him regulating the prices etc?

A. We are.

X-*Q.* 23. Is it not your understanding that he has a similar arrangement with most of the jobbing houses throughout the country?

A. It is.

X-*Q.* 24. Most of these jobbing houses have salesmen on the road have they not, as you understand it?

A. Yes, sir.

X-*Q.* 25. When you take into consideration the fact that McClain has been advertising the sweat pads himself and that he has an arrangement with hundreds of jobbers throughout the country by which his sweat pads are sold, and that these jobbing houses have their traveling men on the road selling the "Success" pad among other things, I will ask you whether you have ever known of any other pad which has been advertised or pushed on the market to anything like the extent that the "Success" pad has been?

A. I don't think I do.

X-Q. 26. In your opinion have not all these things contributed largely to the popularity and extensive use of the "Success" pad?

A. I don't know that it makes much difference.

X-Q. 27. Do you mean to say that you think it don't make much difference how extensively an article is advertised, or how many people are engaged in selling it, is that your opinion?

A. Yes, sir; it does not make much difference how much they advertise now, it will sell without advertising.

X-Q. 28. I am not asking you about the present time, I again ask you, if in your opinion the popularity and extensive use into which the "Success" has come have not been the result in a large measure to the manner in which they have been advertised and pushed on the market in the past. Please give me your opinion on the question as thus explained?

A. I don't think it makes much difference about the advertising of them. I have sold them on the road before they were advertised by merely showing the pad.

X-Q. 29. Then the fact that the traveling men from the various jobbing houses throughout the country have offered them for sale wherever they went you think has had more to do in introducing them and getting into extensive use than the advertising of them by McClain?

A. Yes, sir.

X-Q. 30. Don't you that that in a large measure accounts for the extensive use into which they have come?

A. No, I don't think that it is.

X-Q. 31. Don't you think that has had something to do with it?

A. It has something to do with it, yes.

X-Q. 32. Has not the "Success" pad aside from its spring hooks been superior in workmanship etc. to the common pads that were on the market before the "Success" came out?

A. Yes.

X-Q. 33. Did you ever know a sweat pad just the shape of the "Success" pad before you saw it.

A. No.

X-Q. 34. Isn't the "Success" pad superior in form to the ones that you were acquainted with before it came out?

Question objected to as incompetent, it not appearing that the witness has ever used pads or has any experience that would enable him to form an opinion.

A. They are a different thing entirely from what we always handled.

X-*Q.* 35. Have not your customers preferred the form of the "Success" pad, aside from the matter of hooks to those that you had previously sold.

A. Well, the form didn't have much to do with it. It was the form they were put on the collar.

X-*Q.* 36. Still that did have something to do with it, did it not in your opinion?

A. Not that I know of.

X-*Q.* 37. Has it not been more profitable per dozen for your house to sell the "Success" pads with their hooks than any other?

A. Well, we make about the same percentage on the cheap pads as we do on the "Success."

X-*Q.* 38. Does not the sale say a dozen or a hundred "Success" pads bring more profit to your house than the sale of a dozen or a hundred of any other kind?

A. Well, we make more money on a dozen, but when we figure percentage, we don't.

ADAM P. BROWN.

CARL W. RICKER.

Q. 1. State your name, age and occupation? Do you carry on business for yourself?

A. My name is Carl W. Ricker; my age, twenty-four years; my occupation, harness maker. Am carrying on business for myself.

Q. 2. How long have you been dealing in sweat pads for horse collars, and what kinds have you dealt in?

A, Have dealt in them for two years. Have dealt in sheepskin pads made by myself and in the "Success."

Q. 3. What pad is it that the users generally demand?

A. The "Success" pad mostly.

Q. 4. When your customers come into the store for a pad what do they ask for? State their language.

A. They generally ask for the pad with the hook on.

Q. 5. Which is the best pad without reference to the hook: the pads made by yourself or the "Success?"

A. The pads that I make myself seem to give the best satisfaction and wear the longest.

Q. 6. Which do you make the most money upon the sale of, that manufactured by yourself, or the "Success" pad?

A. That manufactured by myself.

Q. 7. Which do you sell most of?

A. The "Success."

Q. 8. While you sell a dozen "Success," about how many of the others do you sell?

A. Well, sometimes I sell more of the "Success" than the others, and sometimes more of the others than of the "Success."

Q. 9. You have stated that you sold more of the "Success" than of the others. Is this true or not?

A. Take it at such a time of the year as this, I sell more of the "Success" than of the others. Take it in the fall of the year, we sell more sheep-skin pads. Take it the year round, I think we sell more of the "Success" than of the sheep-skin pads.

Q. 10. What feature of the "Success" pad is it that people like; that is, what influence has the hook in giving it popularity?

A. The hook holds the pad more stationary to the collar than any other.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 11. Did you ever make or sell a sweat collar that was fastened to the horse collar by straps and buckles?

A. No, sir.

X-*Q.* 12. From whom do you buy your "Success" sweat collars?

A. Jacob Brown.

X-*Q.* 13. How are your sheep-skin pads fastened to the horse collar?

A. I sew them into the collar.

CARL W. RICKER.

Q. 1. State your name, age, place of residence and occupation?

A. My name is Will H. Olmstead; my age, twenty-seven years; place of residence, Syracuse, N. Y.; and business, saddlery hardware.

Q. 2. Does your house deal in sweat pads for horse collars, and how long have you dealt in them?

A. Yes; and ever since we have been in business. I have been in the firm about six years.

Q. 3. What kinds did the firm deal in prior to 1884, and did they make them or have them made for their own trade?

A. We handled sweats that were sewed in, as they were called. We had them made.

Q. 4. During and since 1884 what kinds of sweat pads has your house handled?

A. We have handled the same as we did before; also the "Success" sweats and others of the same general style.

Q. 5. Please describe more particularly these others you say are of the same general style?

A. By the same general style I mean sweats made of white drill of similar shape and size that are attached to collars in various other ways.

Q. 6. Please give us some idea, and as closely as you can, as to how rapidly the demand for the "Success" pad has increased, if at all, from the first year you handled it until the present time?

A. The first year, 1884, we sold in the neighborhood of 150 dozen; last year we sold over 250 dozen: to the best of my recollection, I don't know the sales of them for 1885.

Q. 7. During this period of time how was it with the demand for the old style of pads that were made for you? Has it increased or diminished, and how much?

A. It has diminished very materially. I should say about seventy-five per cent.

Q. 8. Assuming that you sold 350 dozen of the "Success" during the year 1886, how many of all other kinds of pads not having metallic grasping hooks did you sell during that year?

A. I can't say positively. I should judge somewhere in the neighborhood of ten or twenty dozen.

Q. 9. What feature, if any of the "Success" pad is it, that has caused it to supercede other kinds of pads in your trade so far as you know?

A. The manner of attaching it to the collar.

Q. 10. You mean the hook don't you?

A. Yes.

Q. 11. I want your opinion of the character of the present demand for that hook upon a pad, and will ask you to assume, that you, or other jobbers should cease to handle pads with substantially that hook on them, but were in place thereof to handle any or all pads in the market, that were without such hooks, what effect would this have upon your pad trade, assuming that your competitors in business continued to handle pads with these metallic grasping hooks?

A. It would about ruin our pad trade. Of course we would sell more of the other kinds of pads than we do now, but the increase in the other pads would be very slight as compared to the loss in those having the hooks.

Q. 12. What was the occasion and reason for your commencing to handle the "Success" pad?

A. We had demands for a hook sweat.

Q. 13. How does your profit compare with the hook sweat and pads that you handled before the hook sweat came on the market? You may state this comparison as a percentage and per dozen pads.

A. In percentage about the same. We handle some cheap pads on which we made a profit of less per dozen than on the "Success," and some higher priced ones on which the profit was greater per dozen than on the "Success."

Q. 14. When you started to handle the "Success," please state, if any, what instruction you gave to your traveling salesmen as to which character of pad to give preference in presenting them to the trade?

A. I don't think we gave any special instructions, but gave them sample of the hook sweat.

Q. 15. Do they now carry any sample of the hook sweat?

A. No, sir.

Q. 16. Why not?

A. Because the pad is too well known by the trade to require it.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 17. You are selling the McClain pads under a contract with him regulating prices, are you not?

A. Yes, sir.

X-*Q.* 18. It is your understanding, is it not, that the jobbers generally throughout the country are selling under a similar contract with him?

A. Yes, sir.

X-*Q.* 19. In view of the advertising which McClain has given the "Success" pad, in view of the number of jobbing houses that are selling his pads, and in view of the number of men which they have on the road selling his pad among other things, I will ask you to state whether you have ever known any other sweat pad advertised and pushed on the market to anything like the extent that the "Success" has been?

A. I don't think I have.

X-*Q.* 20. Have not all these things contributed, in your opinion, to the extensive use into which the "Success" has come?

A. In a measure, possibly.

X-*Q.* 21. Is not the "Success" pad in its workmanship, etc., superior to the pads that were on the market prior to its introduction?

A. I do not think so. The style of the sweat and the method of attachment to the collar, in my opinion, are the principal causes of the large increase in the sale of the sweats.

X-*Q.* 22. What do you mean by the style of the pad?

A. The old style of sweats were smaller and altogether different in the shape, and very difficult to keep in place on the collar. They didn't serve so well the purposes of a sweat collar.

X-*Q.* 23. Did you ever sell sweat collars that were held in place by straps and buckles?

A. No, sir.

RE-EXAMINATION.

Q. 24. I will call your attention again to cross-question 19, which will be re-read to you, and ask you to state, first, whether

the advertising that the "Success" pad did for itself was or was not a greater aid to its introduction than all the other advertisements that were given to it? And I will ask you, secondly, whether as matter of fact the complainant did not advertise his pads without hooks quite as much at least as he did those with hooks?

A. Yes; it was a greater aid than the other advertising. I can not say positively as to the latter part of the question.

WILL H OLMSTEAD.

BYRON D. BRAMER.

Q. 1. State your name, age, residence and occupation?

A. My name is Byron D. Bramer; am fifty-two years old; my residence, in Syracuse, N. Y., and my occupation that of harness manufacturing.

Q. 2. Do you deal in sweat pads for horse collars, and how long have you dealt in them?

A. I do, and have made sweat collars for thirty years.

Q. 3. Do you deal now in what is known as the "Success" pad, and about how long have you been handling that?

A. I do deal in it and have since it first came into the market about four years ago.

Q. 4. About how do your sales of it at present compare with your sales of it the first year you handled it?

A. I probably sell now four to one what I did then.

Q. 5. What kind of pads did you sell chiefly before you handled the "Success."

A. The old-fashioned sweat pad that every harness maker made that was sewed into the collar.

Q. 6. Has your trade in these old-fashioned sweat pads increased or diminished and about how much since you have been handling the "Success?"

A. It has diminished. I probably don't sell one of the old-fashioned pads where I sell twenty of the "Success." The old sweat pads have almost entirely gone out of use.

Q. 7. Then the introduction of the "Success" has practically stopped yonr manufacture of sweat pads?

A. It has; almost entirely.

Q. 8. What is the feature of the "Success" pad, and the advantage arising therefrom, that has made it so popular?

A. Probably the ease with which it can be adjnsted to the collar. While the old-fashioned pad we had to sew in and it staid in.

Q. 9. And you would say that the easy attachment, together with its capacity of being more easily removed for drying after it had been saturated with sweat, was its special advantage?

A. Yes, that and the case with which it could be put into another collar.

Q. 10. Did you sell the "Success" when the hooks were attached te the pads as shown in "Defendants Exhibit McClain's Single Roll Spring?"

A. Yes, sir.

Q. 11. Was there any serious complaint with reference to the hooks so attached, or did they answer the purpose about as well as the present swiveling mode of attachment?

A. There was occasionally complaint of the hooks pulling off.

Q. 12. Out of a hundred pads about how many would pull off according to your observation?

A. I don't think more than one or two in a hundred, I had very little trouble with their pulling off as far my experience went with them.

Q. 13. When you made the old-fashioned pads, did you ever attach them to the collar by tie strings or by strap and buckle?

A. Never any of my own make but I have bought sweat collars that buckled on, before the "Success" came out.

Q. 14. Which was the best mode of attaching the pad to the collar, strap and buckle or sewing them in?

A. Sewing them in as far as my observation went. I never had any success with the strap and buckle.

Q. 15. What was the objection to the strap and buckle fastening that rendered that method inferior to sewing them in?

A. The only objection I had was the people didn't like it and wouldn't have it. They complained that it wouldn't stay in place.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 16. Is not the "Success" pad superior in workmanship etc. to the pads that you were acquainted with before its introduction?

A. I don't know that it is in workmanship, but in practical use it is. People like it better and it has taken the place of the old-fashioned pad.

X-Q. 17. In your opinion is it not made of better material than the old style pads?

A. The old style pad I made myself were all made of sheepskin. I have bought a sweat pad make of bed ticking and enameled cloth, but the "Success" pad has almost entirely superseded the sale of that; the "Success" pad and others similar to it.

X-*Q.* 18. Which is better material for a pad, sheepskin or the drilling used in the "Success?"

A. The judgment of the people is in favor of the drilling; sheep-skin pad will out-wear it.

X-*Q.* 19. The pad that was made of bed-ticking and enamled cloth, was fastened by straps and buckles, was it not?

A. Not always, the only ones that went in with straps and buckles and enameled cloth that I used, were made of bed-ticking and enameled cloth. The bed-ticking went next to the horse and the enameled cloth next to the collar.

X-*Q.* 20. Did you ever know a sweat pad the same in shape as the "Success" before it came out?

A. No, sir.

X-*Q.* 21. Is not the "Success" better in its form than the old style pads?

A. The judgment of the people says it is; my judgment goes only to the extent of the demand for it by customers. I have no practical knowledge of it.

X-*Q.* 22. Do you buy sweat collars of traveling salesmen from jobbing houses?

A. I buy from jobbing houses direct.

BYRON D. BRAMER.

Q. 1. State your name, age, residence and occupation?

A. George Windheim, fifty-two, Utica, N. Y., saddlery hardware merchant.

Q. 2. How long have you carried on the business of a saddlery merchant?

A. Twenty-one years the 16th of last April.

Q. 3. Do you sell sweat pads for horse collars, and how long have you been engaged in doing so?

A. More or less for the last twenty years.

Q. 4. Do you sell the "Success" pad, and how long have you been dealing in it?

A. I do; since July, 1883.

Q. 5. During that time have your sales of that pad increased, and about at what rate per annum?

A. I can give you the figures according to my books. I have not figured out the percentage. From July 30th, 1883, until November 13th, 1883, I paid them $189.50; from January 14th, 1884, until December 9th, 1884, I paid $1169.25; from January 16th, 1885, to November 12th, 1885, I paid them $1216.32; from January 18th, 1886, to December 27th, 1886, $1911.70; and from January 14th, 1887, until May 15th, 1887, $1075.90; and have orders unfilled there.

Q. 6. I observe that the increase for the year 1885 was quite inconsiderable. Was there any special reason for that?

A. Yes, I think so. It was on the general dullness of trade, owing to the low price of hops, of which this is the center; and also it might have been that more or less of the small trade had carried over some of the goods.

Q. 7. Please state what kinds of pads you dealt in prior to the introduction of the "Success" pad, and how they were attached to the collar?

A. They were the old fashion sweats sewed in.

Q. 8. Has your trade increased or decreased, and is there much of it remaining?

A. Upon the old sweats we sell scarcely any since selling the "Success."

Q. 9. Of the pads that were sold prior to the introduction of the "Success," are there many, or any, sold now?

A. Very few. I have not bought any in two or three years with a single exception, and that is I could not get any "Success" about a year ago, and I bought five or six dozen from a Detroit, Mich., firm, and can not sell them at cost.

Q. 10. How were those that were bought about a year ago arranged to be secured to the collar?

A. With a leather strap and buckle at the bottom.

Q. 11. How many of that lot of five or six dozen have you sold, and how many of them have you on hand?

A. I think I have three or four dozen on hand. I did not sell more than two dozen all told.

Q. 12. What difference in price is there between these and the "Success" pad? I mean your selling price.

A. I have offered these bought in Detroit at $4.00 per dozen. I sell "Success" No. 1 at $6.50, no deviation. But I would here add, in offering those at $4.00 is to get rid of them, and that is less than cost.

Q. 13. State, if you know, the defect incident to the use of the strap and buckle pad that prevents your selling?

A. The reason is, they will not hold their place in the collar.

Q. 14. What is the feature of the "Success" pad that has made it supersede other pads that were in use before it?

A. The adjustable hook fastening.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 15. You are selling the "Success" pads under an agreement with McClain regulating prices, etc.?

A. I am.

X-*Q.* 16. Is not the "Success" pad superior in workmanship, etc., to the pads which were in the market before the "Success" pad came out?

A. I think it is on general principles.

X-*Q.* 17. Did you ever see a pad of the same shape or form of the "Success" before it came out?

A. I think one similar, but would not be positive if I saw it just before or just after the "Success" came out. The one I refer to was closed at top and bottom, and could be used for only one sized horse.

X-*Q.* 18. Then you would consider the "Success" pad better in its form than this pad which can only be used for one sized horse?

A. I should.

X-*Q.* 19. Do you not consider the "Success" pad more desirable in its form than any pad with which you were acquainted before it came out?

A. I do.

X-*Q.* 20. I have been speaking of the form and workmanship of the pad without reference to the spring hooks. You have so understood me, have you not?

A. Not exactly. I think the pad itself (the "Success" I mean) would not sell without the hooks; and for this reason: I have similar pads since the "Success" came upon the market, but without the hooks, and they would not sell at even at a less price. I refer to those with the straps and buckles.

X-*Q.* 21. But I ask you again if the "Success" pad is not in your opinion better, in form, workmanship, etc., aside from the hook, than the old style pads that were in the market before the "Success" came out?

A. I certainly think it is.

GEORGE WINDHEIM.

GEORGE KNEFLEY.

Q. 1. State your name, age, residence and occupation?

A. George Knefley, thirty-seven, Utica, N. Y., harness maker.

Q. 2. How long have you been engaged in business of making or selling sweat pads for horse collars?

A. About fourteen years.

Q. 3. Do you sell the "Success" pad, and how long have you been doing so?

A. About four years I have been selling them.

Q. 4. What effect has the introduction of the "Success" pad had upon the demand for pads such as you made and sold before the introduction of the "Success?"

A. It has diminished the sale of other sweats.

Q. 5. Has the demand for the "Success" increased since you commenced to handle them, and at about what rate per annum?

A. It has increased, to the best of my judgment, twenty-five per cent per annum.

Q. 6. What kind of pads did you make or sell before you handled the "Success," and how were they attached to the collars?

A. I have made them in one piece and in two pieces; mostly in two pieces. Most of them were fastened by being sewed in to the collar; some had buckles and straps for securing them to the collar.

Q. 7. Did you make pads in one piece with buckles and straps for securing them to the collar?

A. I could not swear positively that I made them myself in buckles and straps, but I have used them that way.

Q. 8. Which is the best mode of securing a pad to a collar, buckles and straps or sewing them in?

A. In my opinion, sewing them in.

Q. 9. Why?

A. Because they are not so apt to slip when sewed in as with a strap.

Q. 10. Is that the reason that people generally, before the introduction of the "Success" pad, preferred pads sewed in to the collar to those secured with buckles and straps?

A. I should think it was.

Q. 11. Why did you commence to deal in the "Success" pad?

A. Because there was a demand for them.

Q. 12. Was there any more profit per pad in selling the "Success" over that of the pads you were handling before?

A. I don't think there is as much profit in the "Success" pad as there was in the pads I handled before. There was more profit in the "Success" when it first came out than there is now, because we then retailed them at a higher price than we do now.

Q. 13. Was there as much profit in the "Success" pad when it first came out as there was in the pads you had handled before?

A. I should think there was.

Q. 14. Can you state which of these, the old pad or the "Success," at the prices at which you first sold them, gave more profit than the other?

A. I don't think I could state that positively.

Q. 15. During the period of time now requisite to sell one hundred "Success" pads, how many of the old kind would you probably sell?

A. I don't know; I sell so few of the old style I don't know how to answer.

Q. 16. What feature of the "Success" pad is it that has given it its popularity?

A. I think the way they are attached to the collar—the hooks.

Q. 17. When people generally come to your store and ask for a pad, how do they usually describe what they want?

A. They did when we first commenced to handle usually ask for a hook sweat pad; now they generally ask for a sweat pad.

Q. 18. How long have you been familiar with pads made in one piece of the general form of the "Success" pad without reference to the hook?

A. I do know as I can state exactly; in the neighborhood of eight or ten years.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 19. Did you ever make or sell a sweat pad just the shape of the "Success" pad?

A. I do know as I can say just the shape.

X-*Q.* 20. Is not the "Success" pad better in its form than any pad that you were acquainted with before it came out?

A. I don't know as I can answer that.

X-*Q.* 21. Is it not your opinion that it is better in its form than any you have previously known?

A. My opinion is, take that same form pad and attach it with a strap, I do not think it any better than what I had sold.

X-*Q.* 22. Is not the "Success" pad better in its workmanship etc., than the old pad you were acquainted with before the "Success" came out?

A. I don't think I can answer that.

GEORGE KNEFLEY.

Q. 1. State your name, age, residence, occupation, and with what house you are connected?

A. Erastus D. Hill, 31, Albany, Clerk, Woodward and Hill.

Q. 2. How long have you been connected with that house?

A. Ten years last January.

Q. 3. Has that house dealt in sweat pads for horse collars, and for how long?

A. As long as my recollection extends we have dealt in sweat pads.

Q. 4. Before the introduction of the "Success" pad, what kind of pads did your house deal in, and more particularly, how were they attached to the collar?

A. Dealt in those to sew in, and to strap on the collar. Pads in two pieces.

Q. 5. How long, if at all, has your house dealt in a "Success" pad?

A. Since July, 1883.

Q. 6. How rapidly have your sales of the "Success" increased from the commencement to date?

A. We sell about ten times more than we did the first time we had them.

Q. 7. The pads that you said were attached by straps, you meant straps and buckles, did you not?

A. Yes.

Q. 8. What effect has the introduction of the "Success" pad had upon your trade for the other pads, whether attached by strap and buckle, or by stitching them in?

A. It has superseded them entirely.

Q. 9. Did you manufacture your own pads prior to the introduction of the "Success," and do you still manufacture any?

A. Manufactured in part only before the introduction of the "Success" and at present manufacture scarcely any, not to exceed two or three dozen a year.

Q. 10. About how many dozen of the "Success" did you sell in 1886.

A. About two hundred and fifty dozen.

Q. 11. Have you acted as traveling salesman for your firm? And did you so act at the time of the introduction of the "Success" pad?

A. Yes, to both.

Q. 12. Did it require a pushing or effort when you first introduced the "Success," and what is the facts as to how rapidly your trade changed from the old pad to the "Success?"

A. It did not require pushing, and it changed almost immediately.

Q. 13. Which gave the larger profit per dozen to your house, the old pad or the "Success?"

A. The old pad.

Q. 14. Did you observe any difference in the rapidity, with which the trade dropped the sewed in pad as compared with the strap and buckle pad?

A. I think the strap and buckle pad was dropped quicker.

Q. 15. What is the feature of the "Success" pad, that has caused it to supersede old pads?

A. The main feature is the adjustible hook.

Q. 16. Prior to the introduction of the "Success" pad, were you or were you not familiar with pads of the same general construction, but without the hooks?

A. Yes.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 17. When you speak of being acquainted with sweat pads of the same general construction of the "Success," do you mean that they were just like the "Success" in their form and shape?

A. They were very nearly alike.

X-*Q.* 18. In your opinion is not the "Success" superior in its form aside from the hooks, to any pad that you were acquainted with before its introduction?

A. Not superior, no.

X-*Q.* 19. Was not the "Success" superior in its workmanship etc. aside from the hooks, to any pad that you were acquainted with before its introduction?

A. No.

X-*Q.* 20. You are selling the "Success" as one of Mr. McClain's agents under a contract regulating prices etc., are you not?

A. Yes.

ERASTUS D. HILL.

Q. 1. State your name, age, residence and occupation?

A. Benjamin F. Bachelor, fifty-one, Albany, N. Y., harness maker.

Q. 2. Do you deal in sweat pads for horse-collars, and how long have you made or dealt in them?

A. Yes, twenty years I have dealt in them.

Q. 3. Do you sell "Success" pads, and how long have you been selling them?

A. Yes, three years.

Q. 4. What kind of pads did you make or sell, prior to the introduction of the "Success" and how were they attached to the collar?

A. I made a sweat collar of my own idea and sewed it in.

Q. 5. Do you make any of them now?

A. No.

Q. 9. Why did you quit manufacturing those pads?

A. I could not sell them, that is, all the others took the place of them.

Q. 7. Then the introduction of the "Success" pad was the cause of your ceasing to manufacture, is that right?

A. All right.

Q. 8. So far as you know, did the introduction of the "Success" pad stop the manufacture by harness makers of the pads they theretofore made?

A. Yes.

Q. 9. Have your sales of the "Success" pad increased since you commenced to handle them, and about how much every year?

A. Yes, about three to one.

Q. 10. Which was the best mode of securing a pad to a collar, before the introduction of the "Success" pad, securing them by straps and buckles, or stitching the pad into the collar?

A. Stitching it in.

Q. 11. Suppose you were now to cease selling a pad with the hook on, substantially like the hook on the "Success" pad, but were to sell other pads fastened to the collar, by any or all of the other modes in practice, what effect would that have upon your pad trade?

A. Lose the trade.

Q. 12. Did you sell the "Success" pad when the hooks were riveted fast to the pad?

A. Yes.

Q. 13. Did that give as good satisfaction to your customers, so far as you know, as the present style of securing the hook to the pad?

A. No.

Q. 14. How many objections did you ever have to it?

A. Don't remember of any.

Q. 15. Did you ever hear any objection to it?

A. No.

Q. 16. If you could only get the hook fastened that way now, couldn't you keep your trade on the "Success" pad just as well as with the swivel hook?

A. I think if the other hook was in the market, I don't think I could keep it.

Q. 17. But if the other hook had never been introduced for market, could'nt you have kept your trade with the riveted hook just us well?

A. Yes.

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 18. Is not the "Success" pad in its workmanship, etc., aside from the matter of hooks, superior to any pad that you was acquainted with before its introduction?

A. No.

X-Q. 19. What pad did you know that was equal to the "Success" in its workmanship?

A. My own.

X-Q. 20. What kind was that?

A. I made two different kinds, I made one of cloth and one of leather.

X-Q. 21. How was the one of cloth made?

A. Made of cotton flannel and enamled drill.

X-Q. 22. The enameled cloth was placed next the horse collar, was it not?

A. Yes, sir.

X-Q. 23. How was it fastened to the collar?

A. Sewed in.

X-Q. 24. Was it made in one or two pieces?

A. Two pieces.

X-Q. 25. And you think that this pad was equal to the "Success" in its workmanship, lasting qualities, etc.?

A. Yes.

X-Q. 26. I will ask you if you knew of any pad for sale on the market generally, that was equal to the "Success" in its workmanship, durability, etc., before the introduction of the "Success?"

A. No.

X-Q. 27. In your opinion, is not the form of the "Success" pad aside from its hooks, superior to the form of any pad that was on the market generally, before the introduction of the "Success?"

A. I think it was.

BENJAMIN F. BACHELOR.

DAVID HANNAY.

Q. 1. State your name, age, residence and occupation?

A. David Hannay, 53, Albany, N. Y., harness maker.

Q. 2. Do you sell "Success" pads, and how long have you been engaged in selling them?

A. I do sell them. I have been selling them for three or four years perhaps.

Q. 3. Prior to your handling the "Success" pad did you make and sell any other pad?

A. I did.

Q. 4. How, did you make them, by the quantity, or for your own retail trade?

A. Both.

Q. 5. About how extensively did you manufacture them?

A. Well, not very extensively I made some for jobbing house J. E. Taylor & Co. of Albany. I made a gross at a time.

Q. 6. Do you manufacture any now?

A. Very seldom, occasionally have to make an odd one.

Q. 7. Why did you quit manufacturing pads?

A. The "Success" pad "knocked me out."

Q. 8. How were those pads which you made attached to the collars?

A. By sewing them in. I had an order for a gross, and they wanted some other way of attaching them, I made them with a strap, but they did not work successfully, and in the mean time, they came across the "Success" and countermanded my order.

Q. 9. You say you made them with a strap, do you mean that these pads were to be attached to the collar by means of strap and buckle?

A. Yes.

Q. 10. Why would they not work successfully when so attached?

A. They wouldn't hold the sweat in place.

Q. 11. Well, but if there was the care, exercised of a careful man and everything fit, would such a mode of attaching be practicable in your judgment?

A. No, I think not.

Q. 12. Since you commenced to handle the "Success" has the demand for them increased, and about how rapidly?

A. It has increased, increased considerably, I can't give figures.

Q. 13. Did you commence to handle the "Success" pad immediately upon its appearance in the market, and if you did not, state why you delayed about it?

A. I did not, for the reason that it was injuring my business.

Q. 14. Why did you commence to handle them at all?

A. Because of the demand for them, my customers asked for them.

Q. 15. Do you make as much profit upon selling the "Success" pad us you did upon your trade in the pads you manufactured before?

A. I do not.

Q. 16. Is there anything new in the form of a McClain "Success" pad to you?

A. Yes.

Q. 17. What is it?

A. The hook is new; the pattern and the shape of the pad is also.

Q. 18. Was there anything novel in the "Success" pad in being closed at the top and open at the bottom?

A. No.

Q. 19. What was new in the shape of the pad?

A. Well, the pad was made wider than usual.

Q. 20. Was it any better pad, without reference to the hook, than pads you had known before?

A. No; I think not.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 21. Was not the workmanship and durability of the "Success" pad, aside from its hooks, superior to those of any other sweat pad that was generally on the market before the "Success" came out?

A. Well, I hardly know.

X-*Q.* 22. Give your opinion?

A. I don't know, speaking from those I made, that they were any better.

X-*Q.* 23. Those that you made were generally intended to be sewed into the collar, were they not?

A. Yes.

X-*Q.* 24. Did you use as good drilling as was used in the "Success?"

A. Sometimes I did, sometimes I did not. I used to use bed-ticking for mine.

X-*Q.* 25. Would that last as long as the material that was used in the "Success?"

A. Well, I should think so. I don't know.

X-*Q.* 26. Taking the pads that were generally on the market, was not the "Success" superior in workmanship, etc., to these?

A. Well, I have very little knowledge of the general sweat pad. I didn't buy any; scarcely any. I don't know that I ever bought any except the "Success."

X-*Q.* 27. Then you can not say whether it was superior or inferior to those that were generally sold?

A. No.

D. HANNAY.

Q. 1. State your name, age, residence and business?

A. John Blackadore is my name; am seventy-six years of age; residence, Canton, Ills. My business is saddlery and harness business.

Q. 2. Do you deal in sweat pads for horse collars?

A. Yes.

Q. 3. Please examine the sweat pad now shown to you, to be marked "Complainant's Exhibit Ortmayer Blackadore Pad," and state whether you bought that pad, and from whom and to whom you sold it, if to any one.

A. I don't know.

Q. 4. Did you sell a pad to a gentlemen named Cleaveland recently, and when?

A. I do not know what his name was. I sold a pad like that to a gentleman a few days ago.

To save time, Mr. Banning states that as at present advised, the pad, with its fastening hooks, referred to in the last two or three questions, is one that has been manufactured and sold by the defendants.

Q. 5. What kind of hook pads do you deal in?

A. I deal in Ortmayer's pad and McClain's pad.

Q. 6. Is there any practical difference in the usefulness of the Ortmayer hook and the McClain hook so far as each has the requisite spring power or elasticity is concerned?

A. I see no difference; that is, I don't see anything of value between the two.

Q. 7. Has the Ortmayer hook sufficient spring to pass over the roll of the collar and assume its original shape on being taken off the collar?

A. I think so.

Q. 8. How long have you dealt in these two pads respectively?

A. This is the second summer with the Ortmayer pad; the other we have been handling longer time.

Q. 9. Which do you make the most profit on the sale of?

A. On the Ortmayer pad.

Q. 10. Which do you sell the most of?

A. Lately we have been selling the most of the Ortmayer. We have been buying and handling more of them; we find a little more money in them.

Q. 11. If you could buy the McClain or "Success" pad as cheaply as you buy the Ortmayer pad, which do you think you would sell the most of?

A. I don't know. I think there would be no difference in the sale of them.

Complainant herewith offers in evidence Ortmayer pad herein above referred to, to be marked "Ortmayer Blackadore Exhibit."

Cross-examination waived by respondent's counsel.

JOHN BLACKADORE.

GEORGE D. ELLIOTT.

Q. 1. State your name, age, residence and occupation?

A. My name is George D. Elliott; my residence, Kewanee, Ills.; my age, sixty-five years; and my occupation, saddle and harness manufacturer.

Q. 2. Do you deal in sweat pads for horse collars?

A. I do.

Q. 3. Have you, or do you deal in the McClain "Success" pad and in the Ortmayer grasping hook pad?

A. I may say in general terms that I do, but I have not known the Ortmayer pad by the name of the "grasping hook pad."

Q. 4. But you do deal in a pad made by A. Ortmayer & Son, of Chicago, which has attached to it a hook made of wire, which clasps the fore roll of the horse collar, do you not?

A. I do.

Q. 5. Is there any difference, so far as practical value is concerned, between the McClain hook and the Ortmayer hook?

A. I think the McClain hook is the more valuable.

Q. 6. But has or has not the Ortmayer hook sufficient elasticity for the purpose for which it is used?

A. I may answer that by stating that I have found no serious difficulty in its use.

Q. 7. Suppose the Ortmayer was made of dead metal, cast iron for instance, would it be practicable to attach it and remove

it from the horse collar in the position that it has necessarily to be while being attached or removed from the horse collar?

A. I think not.

Defendant's counsel calls complainant's counsel's attention to the notice respecting costs spread upon the record at Toledo, and asks complainant's counsel whether he considers that notice applicable to this trip, or whether he desires defendant's counsel to repeat it in connection with each deposition taken.

Complainant's counsel replies that he considers himself duly notified of the matter referred to.

Cross-examination waived by defendant's counsel.

GEORGE D. ELLIOTT.

BERNARD THIEMANN.

Q. 1. State your name, age, residence and occupation?

A. Bernard Thieman, forty-eight years, Quincy, Illinois, harness maker.

Q. 2. State whether you are engaged among other things in selling sweat pads for horse collars?

A. Yes, sir; we, my partner and myself, sell sweat pads for horse collars.

Q. 3. Do you sell the McClain "Success" pad and the Ortmayer hook pad?

A. We have sold the Ortmayer and we have sold the "Success."

Q. 4. Is there any difference, so far as practical utility is concerned, between the spring hooks used upon the Ortmayer pad and those used upon the "Success" pad?

A. Not as far as I know of.

Q. 5. Please examine the pad shown to you, and state from whom you bought it, and to whom you sold it, if to any one?

A. We bought from Ortmayer's man, as far as my memory goes, and sold it to Mr. E. L. McClain to-day?

Q. 6. How long have you been dealing in the Ortmayer pad?

A. As near as I remember, about two years.

Q. 7. Is there any difference, so far as you know, between the hooks on the pad shown you and the hooks that have been upon the Ortmayer pads that you have dealt in for the last two years, either in the form of the hook or in the amount of elasticity it has?

A. Not that I could say that there is.

Q. 8. If the Ortmayer hooks were made of metal that had no elasticity or spring in it, would they answer the purpose that they do answer?

A. I don't think they would.

Q. 9. These spring hooks of Ortmayer's, will they fit over collar rims varying somewhat in thickness?

A. Not if they are too heavy.

Q. 10. Will they fit over collar rims varying a quarter of an inch in thickness or diameter?

A. Yes, sir; I think they will.

Q. 11. Will they fit over collar rims varying three-eighths of an inch in thickness or diameter?

A. I think there is that much spring in it.

Complainant herewith offers in evidence the Ortmayer pad referred to in the foregoing deposition, to be marked "Complainant's Exhibit Ortmayer Thiemann Pad."

CROSS-EXAMINATION BY MR. BANNING.

X-Q. 12. The rim of the collar has a certain amount of springiness in it, has it not?

A. As to a certain extent; not a great deal.

X-Q. 13. Did you ever pull the Ortmayer hook open three-eighths of an inch?

A. I only pulled them open when I put them on a collar.

X-Q. 14. How much does the rim of collars on which these pads are used differ in thickness or diameter in different collars?

A. I should think, to the best of my judgment, from one-eighth of an inch to five-eighths of an inch in diameter.

X-Q. 15. Do you remember the name of the man you bought this Ortmayer pad of?

A. I think it was Mr. Haus, to the best of my recollection.

BERNARD THIEMANN.

Q. 1. State your name, age, residence and occupation, and further, whether you deal in sweat pads and whether you have handled the "Success" pad and Ortmayer grasping hook pad?

A. Louis Schlierbach; age, 55 years; Pana, Illinois; occupation, harness maker and saddler. I deal in sweat pads. I have handled both of them.

Q. 2. How long have you handled the Ortmayer grasping hook pad?

A. I think last season and this season.

Q. 3. Please examine "Complainant's Exhibit Ortmayer Thieman pad" and state whether the hooks upon that pad are similar in all respect to the hooks that have been upon the Ortmayer pads that you have dealt in last season and this season?

A. I am not certain, I think there was another hook made by Ortmayer before this one. The Ortmayer pads that I have now, are like the hooks in the exhibit shown to me.

Q. 4. How long is it since you have known of Ortmayer hooks upon pads similar to the hooks upon the exhibit?

A. Last season and this season.

Q. 5. The other Ortmayer hooks of which you speak, when were they used and what were they like?

A. Well, I do not know that I can describe them, I used pads of Ortmayer the year before that and I think they had that hook on.

Q. 6. Confine yourself to hooks, such as you have dealt in last season and this on the Ortmayer pad. Have they sufficient spring or elasticity for convenient manipulation over the rolls of collars?

A. I have sold them to farmers, and I have heard of no complaint.

Q. 7. If those hooks were made of metal that had no elasticity whatever, would they answer the purpose for which they were intended?

A. That I could not tell until I would see such hook as that.

Q. 8. Then you have never seen such a hook as that, have you?

A. I think the Straus hook was something like that in metal, I handled the Straus hook last year and the year before.

Q. 9. Is there any practical difference in the usefulness of the Ortmayer hook and the McClain hook so far as the amount of spring and elasticity are concerned?

A. I haven't found any.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 10. Was there any complaint from your customers about the hooks on the Straus pads?

A. Yes, sir.

X-*Q.* 11. What was that complaint?

A. That hook had a slide that could be pulled out and in. It did not give satisfaction.

X-*Q.* 12. There is some springiness or elasticity in the rolls of a horse collar, is there not?

A. There is some.

X-*Q.* 13. How much do the rolls of horse collars differ in thickness or diameter on those collars in connection with which sweat pads are used?

A. Probably half an inch or three quarters, of the width of the stuff before it is rolled up. I never measured the diameter after it was rolled up.

Q. 14. How many years since you cut out and made rolls for horse collars?

A. I quit making a business of it sixteen or seventeen years ago, but I have done it since occasionally for a customer. It is five or six years since I cut one. It may be longer.

LOUIS SCHLIERBACH.

JACOB OTTO.

Q. 1. State your name, age, occupation and residence?

A. My name is Jacob Otto; my age, thirty-six years; occupation, harness maker; my residence, Watseka, Iroquois County, Illinois.

Q. 2. Have you dealt or do you deal in the "Success" pad and in the Ortmayer grasping hook pad?

A. I have dealt in the "Success" pad, but do not at present, and am handling the other pad now and have been during the present year.

Q. 3. Is there any practical difference in the operation of the spring hooks attached respectively to the Ortmayer and the "Success" pad?

A. The principle of the working I think is the same, but the "Success" hook has more spring to it than the Ortmayer hook.

Q. 4. But the Ortmayer hook has sufficient spring to answer the purpose for which it was intended, has it not?

A. I guess it has; it works. I don't know whether it has sufficient spring or no.

Q. 5. The Ortmayer pads that you have handled thus far have hooks on them with as much elasticity or springiness as the hooks attached to "Complainant's Exhibit Blackadore Pad," have they not?

A. I think they have—they feel like it.

Q. 6. Suppose a hook to be made in all respects like the Ortmayer hook except that it be made of rigid metal without springiness or elasticity, would it answer for this purpose?

A. I could not say.

Q. 7. Why?

A. I could not say why either. I never tried one of that kind.

Cross-examination waived.

J. OTTO.

JAMES W. SEE.

Q. 1. You will please examine and state whether you have read and understand the following exhibits offered in evidence by defendants in this case; Letters Patent to Montleart and Tent No. 41528; to Wm. R. Phelps, No. 48586; to H. E. Churchill, No. 87543; to James L. Moore, No. 88060; to Jno. H. Weeden, No. 91389; to Jas. F. Walsh, No. 108071 and reissue of the same No. 7951; to Lemuel L. Hull, No. 112713; to Thomas C. Rice, No. 129170; to Felice Fabrice, No. 131816; to Marston & Phillips, No. 143364; to Lindsley & McIntosh, No. 143987; to John M. Bright, No. 157367; to Holabird & Parks, No. 160432; to Andrew Ortmayer, No. 162095; reissued No. 6969 and again reissued No.

10055; to Robert C. Nichols, No. 164200; to Samuel Ayres, No. 168957; to Edwin W. Grove, No. 187621; to Lucius Deming, Assignor etc., No. 198191; to John P. Lindsay, No. 198890; to Patrick F. Tunny, No. 207694; to Geo. A. De Zeng, No. 208516; to Edward Shaub, No. 220550; to Joel Jenkins, No. 231051; to John T. Stall, No. 263857; to Hubert L. Judd, No. 254983; to Geo. P. Cole, No. 256977; to Henry R. Heyl, No. 264947; to Alphonse T. Cwerdinski, No. 289392.

And English Letters Patent to Martin Van Butchel, No. 1404 of 1783; to W. E. & W. M. Cochrane, No. 612 of 1853; and also whether you have examined and understand the construction and mode of operation of the following model Exhibits to wit; "Holt No. 8;" "Burbecker No. 9;" "Burbecker No. 10;" "Holt No. 6;" "Jenkins No. 3;" "Saltsman No. 11;" "Ortmayer No. 12;" "Jenkins No. 2;" "Jenkins No. 1;" "Holt No. 7" and "Jenkins No. 5."

A. I have examined the matters referred to, and I believe that I fully understand them.

Q. 2. I want your opinion as to how these devices and patents compare with the inventions shown, described and claimed in Complainants Exhibits, severally, McClain's patents Nos. 1, 2 and 3, with your reasons for such opinions as you may express and in giving this or these opinions, you may refer to these exhibits severally or you may take any number of them in one category, where in your judgment similarity of construction principle and intended use justify that course?

A. I class together the patents Moutleart and Tent; Marston & Phillips; Nichols; Lindsay; Jenkins and Judd; and with these patents I class the exhibits Ortmayer No. 12; Jenkins No. 2; Burbecker No. 10; Jenkins No. 1; Saltsman No. 11; Jenkins No. 3; Burbecker No. 9 and Jenkins No. 5.

This class exhibits safety pins and drapery hooks, intended for the attachment of two pieces of fabric to each other, or for being themselves attached to a single piece of fabric to permit that fabric to be suspended from a horizontal supporting medium, none of them present so far as I can see, to any degree whatever, any analogy to the invention set out in the three Complainant patents. None of them appear to any degree whatever to be suggestive, even in form, of the inventions of the McClain patents, or

Q. 3. Is there any practical difference in the operation of the spring hooks attached respectively to the Ortmayer and the "Success" pad?

A. The principle of the working I think is the same, but the "Success" hook has more spring to it than the Ortmayer hook.

Q. 4. But the Ortmayer hook has sufficient spring to answer the purpose for which it was intended, has it not?

A. I guess it has; it works. I don't know whether it has sufficient spring or no.

Q. 5. The Ortmayer pads that you have handled thus far have hooks on them with as much elasticity or springiness as the hooks attached to "Complainant's Exhibit Blackadore Pad," have they not?

A. I think they have—they feel like it.

Q. 6. Suppose a hook to be made in all respects like the Ortmayer hook except that it be made of rigid metal without springiness or elasticity, would it answer for this purpose?

A. I could not say.

Q. 7. Why?

A. I could not say why either. I never tried one of that kind.

Cross-examination waived.

J. OTTO.

JAMES W. SEE.

Q. 1. You will please examine and state whether you have read and understand the following exhibits offered in evidence by defendants in this case; Letters Patent to Montleart and Tent No. 41528; to Wm. R. Phelps, No. 48586; to H. E. Churchill, No. 87543; to James L. Moore, No. 88060; to Jno. H. Weeden, No. 91389; to Jas. F. Walsh, No. 108071 and reissue of the same No. 7951; to Lemuel L. Hull, No. 112713; to Thomas C. Rice, No. 129170; to Felice Fabrice, No. 131816; to Marston & Phillips, No. 143364; to Lindsley & McIntosh, No. 143987; to John M. Bright, No. 157367; to Holabird & Parks, No. 160432; to Andrew Ortmayer, No. 162095; reissued No. 6969 and again reissued No.

10055; to Robert C. Nichols, No. 164200; to Samuel Ayres, No. 168957; to Edwin W. Grove, No. 187621; to Lucius Deming, Assignor etc., No. 198191; to John P. Lindsay, No. 198890; to Patrick F. Tunny, No. 207694; to Geo. A. De Zeng, No. 208516; to Edward Shaub, No. 220550; to Joel Jenkins, No. 231051; to John T. Stall, No. 263857; to Hubert L. Judd, No. 254983; to Geo. P. Cole, No. 256977; to Henry R. Heyl, No. 264947; to Alphonse T. Cwerdinski, No. 289392.

And English Letters Patent to Martin Van Butchel, No. 1404 of 1783; to W. E. & W. M. Cochrane, No. 612 of 1853; and also whether you have examined and understand the construction and mode of operation of the following model Exhibits to wit; "Holt No. 8;" "Burbecker No. 9;" "Burbecker No. 10;" "Holt No. 6;" "Jenkins No. 3;" "Saltsman No. 11;" "Ortmayer No. 12;" "Jenkins No. 2;" "Jenkins No. 1;" "Holt No. 7" and "Jenkins No. 5."

A. I have examined the matters referred to, and I believe that I fully understand them.

Q. 2. I want your opinion as to how these devices and patents compare with the inventions shown, described and claimed in Complainants Exhibits, severally, McClain's patents Nos. 1, 2 and 3, with your reasons for such opinions as you may express and in giving this or these opinions, you may refer to these exhibits severally or you may take any number of them in one category, where in your judgment similarity of construction principle and intended use justify that course?

A. I class together the patents Moutleart and Tent; Marston & Phillips; Nichols; Lindsay; Jenkins and Judd; and with these patents I class the exhibits Ortmayer No. 12; Jenkins No. 2; Burbecker No. 10; Jenkins No. 1; Saltsman No. 11; Jenkins No. 3; Burbecker No. 9 and Jenkins No. 5.

This class exhibits safety pins and drapery hooks, intended for the attachment of two pieces of fabric to each other, or for being themselves attached to a single piece of fabric to permit that fabric to be suspended from a horizontal supporting medium, none of them present so far as I can see, to any degree whatever, any analogy to the invention set out in the three Complainant patents. None of them appear to any degree whatever to be suggestive, even in form, of the inventions of the McClain patents, or

to possess the capacity by any possible mode of application, or by any reasonable modification of form, of holding a collar pad properly against the inside of a horse collar as set out in the McClain patents; nor do any of them, aside from exhibiting mere structures of tortured wire, suggest the double bow, provided with the continuous connecting part and side-projecting swivel-prongs of Complainant's patent No. 3.

I class together Exhibits "Holt No. 6;" No. 7 and No. 8. No. 6 is a curtain ring intended as a hanging attachment for curtains to curtain poles, and Nos. 7 and 8 are picture hooks, intended to form a moveable substitute for nails driven in a wall. These three exhibits present no anology whatever to the three Complainant's patents. There is no ground work on which to base a comparison, as the three exhibits differ radically from the patents in form, in mode of use, in mode of operation, in intended purpose and in result.

I class together the patents of Fabrici; Weeden; Phelps; and Churchill. All relate to head rests to form high extensions of seat backs. All of them involve, essentially, a projection from the head-rest part provided with a pair of interacting clamp jaws. The head rest is in each case padded, but in no case is provision made by which the pad or a portion of the pad is held against the article to which it is affixed through the independent action of a single clasping spring co-acting with the pad itself. In other words, none of these head-rests, or head-rest pads are arranged to lie against the face of the seat-back and form a lining therefor. In fact most of these patents pre suppose a properly padded seat back, and the object of the devices is not to furnish the seat back with the proper pad lining, but to extend the seat back upward. In other words, these devices are not lining pads, but are mere height extensions. None of them are suggestive to any degree of the idea of a means for attaching pad linings to seat backs, otherwise hard. In fact, all of the devices of these patents carry with them as essential elements, hard unyielding elements, which must themselves be padded and no pertinent matter of interest presents itself in connection with the manner in which such padding is attached to such hard un-yielding parts. None of the devices of these patents appear in any way applicable to the purpose of McClain's or Scherling's patents, as none of the devices

suggest any means whatever, by which a soft collar pad may lie snugly against the inside of a horse collar, and be retained by clasping the outer surface of the collar roll, free of interferences with the hames as clearly set out in the McClain patents Nos. 1 and 2; nor do they exhibit the double bow provided with the continuous connecting piece and side projecting swivel prongs of the Scherling patent.

I class together the Shaub patent; the Grove patent; the Holabird and Parks patent and the Moore patent. All of them present merely metallic holders, to be attached to the person and form cylindrical sockets to receive lead pencils, cartridges, and other cylindrical articles, which can be poked endwise into or withdrawn endwise from such sockets. None of them present in any degree the opening and closing clasp of McClain fitted for attachment to a pad lining, and for exterior clasping engagement with a collar roll free of interference with the hames; nor do they present the side projecting swivel-prongs of the Scherling patent. In this class also should be placed the Cwerdinski patent, which is subsequent in time to the McClain patents, and totally lacking in suggestion of the connected side bows, provided with the side projecting swivel prongs of the Scherling patent.

The Heyl patent presents no ground work for the comparison asked for. It is a mere suspension hook intended to be glued to the wall and suspend an article held in engagement therewith by gravity.

As to the Van Butchell English Patent, I cannot make the comparison asked for, for the reason that it does not contain any description of any device, or of the mode of operation of any device. It is a mere mass of words.

As to the Tunny patent, it presents merely a hook and eye for hitching mens' suspenders and presents no ground work for comparison with any of complainants patents.

Ayres patent presents no ground work for comparison, as it presents simply a block of hard wood, forming a truss pad, provided with loops upon its back through which the attaching strap may be passed endwise.

The Rice patent presents no ground work for the comparison as it exhibits simply a suspension hook to support an article held in engagement therewith by gravity.

I class together the patents of Walsh and Bright. They exhibit horse collar pads. The pads have buckles and straps attached to them by means of which the pads are attached to horse collars; in other words the pads are simply strapped to the collars. As they are totally lacking in the inventions set forth in the McClain patents and Scherling patent, or in analogous devices, there is no ground work on which to base a comparison.

The patents to De Zeng, and to Lindsley and McIntosh make reference to pads for horse collars, but do not show or describe the manner of attachment, and hence no comparison can be drawn.

The Cole patent shows a horse collar with a pad attached to it permanently by means of clinched wire staples. The device presents no analogies in connection with the McClain and Scherling patents.

The Deming patent presents a horse collar provided with a slip lining. This slip lining is not a soft pad. The patent calls it an "attachment," the intention being that the collar and attachment may shift independently of each other. The slip lining or attachment is formed of leather crimped to fit the collar and no means of attachment other than its crimps are provided. It presents no comparable analogies to the McClain or Scherling patents.

The Ortmayer patent, and the Hull patent, exhibit harness pads provided with closed loops to surround the harness parts to which the pads are to attach, the harness parts being slipped endwise into and endwise out of these loops. They present no analogies on which to base comparisons with the McClain and Scherling inventions.

The Stoll patent does not exhibit any horse collar with the lining pad. It refers to a horse collar pad, but the pad there meant is a hard leather piece to go on top of the collars. This pad is held to the collar by means of ordinary straps on the pad, engaging ordinary buckles on the collar. The pad carries a rigid hame hook securely fastened to it, and the pad thus serves as a means for attaching this hame hook to the horse collar. As the device is lacking entirely in the features of the McClain and Scherling patents no comparison can be made.

Cochrane and Cochrane's English patent relates to saddle girths. An independant girth is firmly strapped around the

horse, so as to be incapable of shifting. This girth is padded at the neck; the padding being attached by stitching. The girth carries on each side an outwardly projecting hook, which comes in front of the pannels of the saddle and serves as stops to prevent the saddle slipping forward on the horse. The girth is not attached to the saddle. The device is not analgous to the McClain inventions as it exhibits no provisions by means of which a loose pad is held in place entirely by means of clasps engaging over and to the rear of a harness-wale, so as to prevent the pad slipping forward.

Q. 3 The defendant A. Ortmayer, and the expert witness Mr. Bates, have expresse doubts in this record, as to whether complainants exhibits McClain's patents Nos. 1, 2 and 3 severally show any invention when considered with reference to the state of the art at their respective dates. Waiving for the present, the question of competency of testimony upon such an enquiry, I will ask you to state frankly your opinion on these several questions, keeping in mind the while the state of the art as exhibited by the patents and exhibits that you have examined, and that you may be fully informed as to the state of this art so far as the record now shows it, I will inform you that prior to the inventions in question, pads were secured to collars commonly in three ways: 1st by what is known as the tie-string method, which consisted of stitching strings of leather to the outer edges of the pad, which strings were brought around the collar and tied together. 2nd What was known as the buckle and strap method which differed from the tie-string method in that one of the strings had a buckle and loop, while the other string had appropriate holes, by which it might be secured to the buckle; in both of these methods the hames passing into the groove of the collar, was supposed by tightning the strings or straps to bind the pad more firmly to the collar; and 3rd, pads were stitched permanently to the collar; and, for the purpose of your answer, you may assume that this latter mode was the one most generally in use, prior to these inventions.

A. Assuming that ready attachability and detachability of the pad from the collar was a result highly to be desired in order that the pad might be properly dried and aired, it would appear that the best organization known to the art, viz: the strap and

buckle arrangement would not permit of this result, owing to the annoyance caused and time consumed in manipulating the many buckles, and also in removing the hames. The invention set forth in the McClain patent, No. 1, rendered possible the desired result in the highest possible degree, as it then became possible to attach and remove the pad by an instantaneous latching or unlatching motion. In view of the fact that neither this art or any foreign art exhibited any organization by means of which this result was, or could be, accomplished, it would appear that the art had, in the truest sense, been enriched by a new and very valuable invention.

It would also appear to me, that when the McClain patent, No. 2, disclosed those improvements which rendered it possible for the latchment attached to the pad to engage any where along the length of the collar, the art became enriched by still another invention productive of new and highly important results. It would also appear to me that the peculiarities of structure set out in the McClain patent, No. 3, involve invention in the production of new and improved means.

The state of other arts might be found to exhibit analogies of form without analogy of purpose, function, or result. This is the case with most all inventions. A hole in the ground and a productive gas well bear strong resemblances to each other; and so also does an iron telegraph pole compare favorably in form with a driven well. The resemblances cease when we are done with form, and the greater improvement has seldom found its suggestion in the mere form of the lesser one.

Q. 4. Your attention is directed to the grasping hooks upon "Complainants Exhibit Defendants Manufacture," and also to "Complainants Ortmayer-Blackadore Exhibit," and to "Complainants Exhibit Ortmayer Thiemann Pad," the latter two exhibits being further illustrations of defendants grasping hooks, and you are asked to state, first, whether in your opinion these hooks are springs, whether by the form of their construction or by any other test known to mechanics, and second, whether there be any difference in the principle of their operation from that of the hook shown in "Complainant's Exhibit, McClain's patent, Nos. 1 and 2."

Defendants counsel objects to the above and all similar questions as being incompetent and immaterial on any issue except that of infringement, and that evidence upon that issue at this stage of the case is improper and inadmissible.

A. Reversing the order of your questions I reply to your last inquiry, as I did to a similar one in my previous examination in this case, that the devices on the exhibit pads operate as set forth in the McClain patents, viz: by opening to admit the fore-roll of a horse collar, and by closing over the outside and rear of the roll free of interference with the hames to hold the pad to the collar.

To the first clause of your inquiry I answer, that the hooks on the exhibit pads are springs.

They have the form of springs. They are formed of spring material. I recognize the material as being hard-drawn wire, the only wire of which springs can be made. I have subjected these hooks to strains, and find that they recover themselves by reason of their resiliency. If they were not springs they would when thus subjected to strain, take a permanent set in an altered form, and be rendered useless for further operations. I can suggest a simple test as to the springiness of these hooks. The circles of the hooks are in most cases larger than their entrance throats. Take a cylindrical stick of wood, small for the circle of the hooks, but large for the throat. You can put this stick in and out of the hooks through the throat, the throats springing open to permit the passage. If the hooks were of soft, drawn wire; in other words, if they were not springs, they would be permantly opened and probably ruined by the first passage of the stick.

Cross-examination waived.

JAMES W. SEE.

Q. 1. State your name, age, business, and whether you are the same Edward L. McClain who is complainant in this cause?

A. My name is Edward L. McClain, age twenty-six years. manufacturer of sweat collars. I am the complainant.

Q. 2. How long have you been engaged in the business of manufacturing sweat collars?

A. I have been engaged in the business of manufacturing sweat collars as a specialty since the fall of 1881, and had considerable experience for probably five years prior to that time while employed in my father's harness shop at Greenfield, Ohio.

Q. 3. Then during the five years preceding the fall of 1881 you worked as a harness-maker, apprentice and journeyman did you?

A. Yes, sir. That is correct.

Q. 4. I wish you to state succinctly, as may be, the history of the inventions shown and described in McClain patents Nos. 1 and 2, and, as incident to this, you may state how long you were engaged in the manufacture of sweat pads as a specialty prior to the commencement of your manufacture of sweat pads with the patented hooks. You may also state in this connection what was the effect of the introduction of these patented hooks upon the demand for the pads that you had theretofore made without such hooks?

A. As already stated, I began the manufacturing of sweat collars as a specialty in the fall of 1881 and prior to that time for five years had had considerable general experience in the manufacture and sale of the common sweat pads while engaged in the harness business. I was familiar with the modes then in use for attaching pads to collars, and knew of their defects generally. I knew that the strap and buckle and tie-string modes were unsatisfactory because they were bunglesome, troublesome, and would not hold the pad in place. I had been called upon frequently to take off the straps and buckles and strings and sew the pad to the collar after it had been used, until finally we began to recommend the sewed-in pad. This, however, was also objected to seriously. It prevented the pad being removed to dry, but a more serious objection was this: there are seasons of the year when pads are not useful. This is during the fall and winter months. During these months the farmer's horse usually becomes plump, and a

collar that fits properly with a sweat pad in it during the summer months, when the horse is thin from work, would become too tight during the winter months. This could not always be remedied by letting the collar out, as a great many collars are permanently fastened at the top and bottom. It was the defects above recited, and others, to those modes of attaching pads to collars that first led my thoughts in the direction of getting up some device by means of which a pad could be detachably connected with the collar in a satisfactory manner—and by satisfactory manner I mean something that would firmly hold the pad in place; that could be easily attached and detached; that would not materially add to the cost of the pad, and that could become generally useful on all styles of collars and pads. It was for the purpose of enabling me to more thoroughly comprehend the problem that I engaged in the pad business. I continued my experiments from the time I engaged in the business, in the fall of 1881, as I had done before, and had in mind various devices before I hit upon the two-roll hook some time in the early part of 1882. I might state that in the meantime, before the invention of this two-roll hook, I had been trying to make a closed top and bottom pad, such as has been referred to in the record as the "M" and "X" pad, that would be so perfect in form and workmanship as to overcome the difficulties that existed to the old style pad, and I believe we succeeded in producing the best pad that had then been made of any kind; but it was objected to. The users claimed, and rightly too, that when they bought a pad for one horse they could not work it on another with a larger or smaller neck; that the pad being closed and stuffed at the bottom obstructed the horse's windpipe; while there were some who objected to using the pad closed either at the top or bottom.

With the invention of the two-roll hook, I believe that all objections that I ever heard were done away with. Nor could I think of any case where this hook would not give satisfaction. I immediately set about getting estimates on the cost of the hook, and making preparation for its use. The first objection that I found to following the plan already mapped out was in attaching the hook to the pad. I desired to use a certain kind of rivet which was then on the market, and which was set by means of machinery, in the use of which rivet I expected to cheapen the

cost of securing the hook to the pad. I also found that for this two-roll hook to become generally useful it would be necessary to use several different sizes, and that it was not convenient to put on to the collar as I had desired. As I considered cheapness and convenience two essential features to keep prominently in mind, I looked farther, and hit upon the single-roll hook. I saw that the objections referred to in the two-roll hook were successfully overcome. I further saw that this hook would become more generally useful. That it could be used at any given point on the fore-roll of a collar, and consequently could be used on any conceivable form of pad. This hook I immediately placed upon the market. This was some time in the fall or winter of 1882, and the reception it met with by the trade was simply wonderful—far beyond my greatest hopes. Wherever the hook-pad was shown, it was sold, and wherever it was sold once it invariably sold again. The use of this hook was continued with great success—the demand for pads with this hook on increasing phenominally, while the demand for the common pad, of which I was then making a pretty general line, began to decrease, and has continued to decrease ever since with me, notwithstanding the fact that through the efforts of others who were manufacturing this common pad to secure trade, the prices have been gradually reduced until to-day we are offering a line of these common pads at but a slight advance above first cost, but without finding a market. In the fall of 1885 I began the use of the swivel hook because of the convenience of attaching the hook to the pad, and have continued its use to the present day. In connection with the introduction of this swivel hook I will add for the purpose of explaining the former statement that what I meant by convenience in attachment was this: In tempering the hooks, through inexperience, occasionally one would break in use, it being tempered too hard. To replace a broken hook the user had to take the pad to his harness-maker for the purpose of having another hook riveted on. As our purpose was to put a practically perfect device on the market we adopted the swivel-hook because in this case the user after securing a hook could put it on the pad himself. I want to state in regard to the tempering of the hooks that it has now become perfected to such a degree that there is no complaint whatever about the hooks breaking, and I believe the former hook, if

tempered in the same skillful manner, would have been free from any complaints of breakage. In regard to the increase of our sales of the hook pad, will say that they have continued to grow until now they have reached the sum of (60,000) sixty thousand dozen per annum, while the demand for the pads without hooks has continued to decrease. We made about three thousand (3,000) dozen of the pads without hooks the first year, and this decrease referred to is based on these figures.

Q. 5. After the introduction of the hook pads to the market, what, if any, change did you make in the quality of the pads without hooks, workmanship and material; that is, did the quality of these pads in your continued manufacture of them deteriorate or improve; and for a further question, how has the quality of these pads compared with the quality of the pads with hooks up to the present time?

A. The material that we used in the pad that we made without hooks was the same that we used in the hook-pad, and has continued to be the same up to the present day, that is, we are using the same material now that we used then, but the workmanship in the common pad—and by this I mean the closed top and bottom pad—was probably somewhat better than the hook pad at the beginning, but there is no difference now, as all the pads are made by machinery, and are consequently uniform in workmanship, whether with or without hooks.

Q. 6. You will please state what was the difference in your selling price, per dozen pads, of the same quality, etc., when they had hooks and when they had not hooks?

A. At the time the hook pad was introduced it sold for fifty cents per dozen more than a similar pad without hooks, but there is more difference now—the pad without hooks having been reduced in price.

Q. 7. There has been some controversy in the record as to whether these hook pads have been specially pushed upon the market as compared with the pads without hooks. I want to know the exact facts in relation to this matter. You may state the efforts made by you from the beginning of your manufacture to the present time to place your different kinds of pads before the public, whether they consisted in sending out traveling sales-

men or in advertisements by newspaper, trade-journal, or catalogue, or by any other means?

A. Well, the facts are that we have always given the pads without books equal prominence in our advertising with the pads with books. In fact, the first catalogue we ever published, which was a small edition of probably five hundred (500) copies, made no mention of the hook-pad, or if it did, it was very meagerly referred to in the back of the book. We have issued three catalogues since the one referred to, copies of which are now lying on the table before me. We have not advertised in newspapers, but have in a few trade-journals. We have no traveling men out with the exception of one six weeks' trip taken by my brother, I think in 1884. These were all the efforts made to push our goods upon the market, save now and then the issuing of a small slip circular for mailing to the trade.

Q. 8. State the date of the issue of the first catalogue, and to which you have referred?

A. It bore the date of January 1, 1884, but it was got out late in the fall of 1883.

Q. 9. Did this first catalogue have any, and about how many, pictorial illustrations of pads without hooks?

A. Yes, sir, the first catalogue contained illustrations of pads without hooks, I should say probably about eight in number, and in addition to this it contained an illustration of one pad with hooks.

Q. 10. Please state the dates of issue severally of the three subsequent catalogues issued by you, and which you say are now lying before you, and submitted to the examination of defendant's counsel, and state also with reference to each of them the number of pictorial illustrations of pads contained therein, and how many of these show hooks and how many do not?

A. January 1, 1885; January 1, 1886, and January 1, 1887. The 1885 catalogue contains illustrations of fourteen (14) pads all told, four of which show hooks, and ten of which show no hooks; that of 1886 shows eighteen (18) illustrations of pads, all told, six (6) of which show hooks, and twelve (12) do not show hooks; that of 1887 shows nineteen (19) illustrations of pads, all told, eight of which show hooks, and eleven (11) of which do not show hooks.

Q. 11. If since your commencement to manufacture the hook pads there have been any parties who started to infringe these patents, and who, upon having had explained to them the character of their liability by their infringement, ceased such infringing manufacture, please state the name of each such infringer and what occurred between you and him, and the circumstances generally of each such case?

A. There have been such cases. The first one was the case of L. D. Randall & Co., of Dubuque, Iowa. They began manufacturing under the Scherling patent, being half owners of the same, and in due time I placed the matter in the hands of my attorney, Mr. Moore, who immediately corresponded with them, and advised them of their liability in the matter, and also suggested to them that they consult some reliable attorney before deciding what was best for them to do. The result was that they did consult some attorney in Chicago, and Mr. Thompson, who is a member of the firm, stopped in Cincinnati on his way East, and informed us that he had been advised that they were infringing, and that they would immediately desist, which they did, and I bought up the patent for a small sum for the purpose of removing the temptation, should it fall into other hands.

The next case was that of Sommers Bros., of St. Louis, Mo., who were using a hook on their pads like the one I have in my hand. I went to St. Louis, in company with Mr. Moore, for the purpose of filing a bill against them, but upon reflection they also concluded they were infringing, and ceased to use the hook. This was in the summer of 1885.

The next case was that of the "Elgin Saddlery Company," of Elgin, Illinois. I corresponded with that firm myself, informing them of their liability, and they, too, stopped using the hook.

The next case was that of Dunlap Bros., of Louisville, Kentucky. I was informed personally by an agent of ours at Lexington, Ky., that he had been waited upon by a member of the Dunlap firm and solicited to place an order with them for their hook-pad. The description of the hook was given accurately, and I wrote to Dunlaps and requested them to send me a sample of the hook. They replied that they were getting out circulars, and that they would send me one of the circulars in a few days,

but the circular did not come, and I have not heard of their putting the pad on the market.

There was another case, that of Duguid & Wells, of Syracuse, New York. I waited upon these people, in company with Mr. Moore, on our recent trip through that State, taking testimony in this case, and, after explaining the matter, they agreed to desist from the further use of the hook.

Complainant herewith offers in evidence, hook referred to by the witness in his last answer, and asks to have it marked "Complainant's Exhibit, Sommers Bros. Hook."

Q. 12. Please describe the hook intended to be made by the Elgin Saddlery Company; that intended to be made by Dunlap Bros., and the hook made by Duguid & Wells?

A. The hook made by The Elgin Saddlery Company was a wire hook, made with a small loop made in each end of the wire, and through these loops a small piece of leather was passed and riveted to the pad.

The Dunlap Bros. hook was described to me as a wire hook, with the ends of the wire somewhat sharpened, to enable the hook to be attached to the pad by forcing these sharpened ends through the pad.

The Duguid & Wells hook was a malleable iron hook, in form like that shown in my patent No. 2.

Q. 13. It has appeared in the cause that parties purchasing your "Success," or hook pads, sign a contract with you substantially, a copy of which appears at ninety-four (94) of defendant's record. I desire to ask you what is the effect of dealers in the "Success" pad being compelled to sign such contract upon the demand for these pads. Is its tendency to increase or diminish the sale of those pads?

A. The contract referred to only has reference to those dealers to whom we sell direct, and not to the trade in general. I believe that if we were to discontinue the contract, the sale of the hook-pad would be greatly increased, far greater than will be the case with this contract in use; but I am not so sure what the effect of the discontinuance would be on our business a few years hence.

Q. 14. Why don't you include in that contract your pads which have not the hooks?

A. Because in my judgment it would be utterly impossible to successfully include those pads with the competition there is in the market.

Q. 15. Then, as I understand you, it is your opinion, and the result of your observation combined, that such a contract can only be insisted upon by a manufacturer who has the exclusive right to make the article to which it relates; and inasmuch as the provisions of that contract are in abridgement of the right of the dealer to make cut-throat prices, it to some extent makes, or has a tendency to make, the article unpopular with the dealer, whose liberty is thus restrained, and this unpopular feature would destroy the trade of a manufacturer who exacts such an agreement as a condition precedent to the sale of his goods, if the dealer could procure the goods elsewhere, or if he could procure a substitute for them, or, if consistently with his interests, he could dispense with them. Does this correctly represent the views intended to be expressed by you?

A. Yes, sir. It does.

Q. 16. What is the difference in thickness or diameter of the rim in the different collars to which these pads are usually applied, and if, as matter of practice, you make your hooks of different sizes or different openings, just state about what the difference is, and how do you manage it?

A. Well, in my judgment, I believe there is an average variation in the rims of collars of a quarter of an inch in the diameter, and I base this statement on my experience in the use of the hooks. There was a time when we ordered hooks of different sizes, and in making those orders we made provision for a variation of one-quarter of an inch in the rolls of the collar; but for the past year and a half we have been ordering almost exclusively a one-sized hook, having found that there is sufficient variation in the openings to enable us, by assorting the hooks, to find hooks that will fit the different sized rims of collars.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 17. It has been your policy to sell your goods to the jobbing houses throughout the country rather than to retailers, has it not?

A. It has been since the first two years of our business existence.

X-*Q.* 18. And these jobbing houses all sell your "Success" sweat collars do they not?

A. They do.

X-*Q.* 19. About how many of them are there throughout the United States and Canada who sell the "Success?"

A. We are selling to about two hundred and fifty (250) jobbers in the United States. The Canadian trade is being supplied by a manufacturer in Montreal.

X-*Q.* 20. And these two hundred and fifty jobbers have salesmen on the road selling your "Success" pads. Among other things do they not, as you understand it?

A. While I have no positive knowledge in the matter, I presume they have. I will state that most of our agents whom I have visited, numbering probably one-fourth or one-third of the whole, have somebody on the road.

X-*Q.* 21. Do not a great many of these firms advertise in circulars, catalogues, and otherwise, the goods which they are selling, including your "Success" sweat collars?

A. I don't know of more than six or eight firms that are advertising our goods in their catalogues, and I only know of these cases by our having been asked for the use of an electro-plate.

X-*Q.* 22. Do you know whether other firms are advertising the "Success" among their own goods or not?

A. I do not, nor do I know what agents of ours issue catalogues outside of a very few. It is not my understanding that the jobbers in general issue catalogues, but only those engaged in the manufacturing business.

X-*Q.* 23. They generally depend upon traveling men do they?

A. I presume they do.

X-*Q.* 24. In describing the catalogues which you have sent out for the years 1885, 1886 and 1887, and in stating the number of cuts which they contain, as showing the relative proportion of matter advertising the pads with hooks and the pads without hooks, you took no account of the printed matter in such catalogues did you?

A. No, sir. There has been nothing said about the printed matter.

Q. 25. In your 1885 circular the fourth page says:

Success: First on the list, first in the rank, first in demand, first in material, first in workmanship, first in everything the word implies, this, the great, the celebrated, the famed "Success," it leads them all and has no rival.

Does it not and is it not the rest of the page devoted to explaining the merits of your "Success" pad?

A. Yes, sir; the fourth page of the catalogue is devoted to enlogizing the "Success" pad and contains the above language; but in order that it may not appear from the above, that these statements were exaggerated, I would like to have copied from the fourth page, also the last paragraph which reads as follows:

"Order this pad, it may be returned if they do not sell."

I believe further that a count of the words in that catalogue describing the "Success" and those describing the common pad will show largely in favor of the common pad, so far as numbers are concerned.

X-*Q.* 26. Are not pages four, five, six, seven, twenty, twenty-one, twenty-two, and twenty-three; (4, 5, 6, 7, 20, 21, 22 and 23) of that 1885 catalogue, devoted to illustrating or describing sweat pads containing spring hooks for attaching them to the collars?

A. Yes, sir. The other twenty-four (24) pages are devoted to describing pads without hooks.

X-*Q.* 27. Are any of them eulogized like the "Success."

A. Not quite so strongly, but I don't think any of the other pads would stand it.

X-*Q.* 28. Referring to the 1886 catalogue which consists of one hundred and twelve (112) pages. I will ask you if eighty (80) pages are not mostly devoted to illustrating, describing and eulogizing the "Success" or spring hooked pads, and in eulogizing I include the testimonials of your customers?

A. Yes, sir; eighty pages are mostly devoted as you have recited. You see the pads have been on the market long enough at the time that catalogue was issued, to enable the trade to judge of the merits of "Success" pads, and we asked them for their experience in handling the goods and we published them in this

1886 catalogue as we did in the 1887 catalogue in an abreviated form.

X-*Q.* 29. And does not that 1886 catalogue contain three pages not devoted to sweat pads either containing or not containing hooks, and eighteen pages devoted to illustrations in the nature of the works of art?

A. It does.

Complainants counsel says that the three catalogues referred to may be marked and identified by the present examiner as "McClain catalogues Nos. 2, 3 and 4," for the inspection of the Court, if this will save the record from being burdened with details as to their contents and he now requests the examiner so to identify them, which is according done. It is also agreed by Mr. Banning of counsel for defendants, that a copy of the first catalogue, if one can be found; may be also similarly marked and identified.

X-*Q.* 30. Referring to this 1887 catalogue, containing one hundred and ten (110) pages, are not eighty pages devoted largely to illustrating, describing or eulogizing the "Success" or spring hooked pads and by eulogizing I include testimonials?

A. It does.

X-*Q.* 31. And are not twenty-four (24) pages devoted to illustrating works of art, or to matters not relating to either the pads with or the pads without hooks?

A. Yes, sir; they are.

X-*Q.* 32. You have named various parties who discontinued manufacturing or selling pads with metallic hooks upon your presenting your claims to them. Were not all of these parties given to understand that unless they discontinued they would be sued?

A. Yes, sir; they were given to understand that they would be sued if they did not stop.

EDWARD L. McCLAIN.

Q. 1. State your name, age, residence, occupation and by whom you are employed?

A. My name is Chas. H. Cleaveland; age, twenty-six years; residence, Greenfield, Ohio; am superintendent of the receiving department of the E. L. McClain Mfg. Co. I have charge of the hooks, getting them ready and having them attached to the pads. Those who do that work are under my supervision.

Q. 2. What if any difference is provided in the openings of these hooks, and state the numbers or sizes of pads upon which these different sized hooks, or hooks with different sized openings, are put?

A. They are tested and sorted into three sizes, the smallest or one closed the most is for a 17 inch pad, the next includes 18, 19 and 20 inch pads, the next twenty-one and twenty-two inch pads. There is about a quarter of an inch difference between those having the smallest openings and those having the largest openings.

Q. 3. If you visited different towns in Illinois and Iowa under the instructions of the E. L. McClain Mfg. Co., within the past two months for the purpose of examining the Ortmayer hook pads wherever you could find them for sale, pleace state in about what number of stores you found them and how many towns you visited in those states and examined for them?

A. I visited about thirty towns in those states for this purpose. I found the Ortmayer pads in six different stores. I purchased the "Ortmayer-Blackadore pad" from Mr. Blackadore.

Q. 4. Did you examine carefully the Ortmayer hooks whereever found with reference to how much elasticity they had, and to the size of the opening, where the rim of the collar entered?

A. I did.

Q. 5. Examine the hooks upon the pad "Complainants Exhibits Defendants Manufacture" and also the hooks upon the two exhibits above referred to viz: "Ortmayer-Thieman pad" and "Ortmayer-Blackadore pad" and state which of these sets of hooks best represent the hooks that you saw in your travels, in the respects above acquired about?

A. I found all having these hooks viz: the hooks shown on he "Ortmayer-Blackadore pad" and the "Ortmayer-Thieman pad" with one exception. That hook differed from these in that it was not flattened at the end.

Q. 6. Did you find any Ortmayer hooks with so large an opening or with so little elasticity as those upon the "Exhibit Defendants Manufacture?"

A. I did not see any hook with so large an opening as this, I believe this on "Defendants Manufacture" is a stiffer hook. I believe this to be the same material as the hooks I saw.

Q. 7. If you have with you an Ortmayer hook, cut by you from an Ortmayer pad, purchased by you on that trip, please state from whom you purchased that pad, and produce the hook?

A. I have, I purchased the pad from Wagonseller of Pekin Ill. and I here produce the hook. Said hook is herewith offered in evidence as "Complainants Exhibit Ortmayer Wagonseller hook?

Q. 8. I want your best judgement as to whether the "Exhibit Ortmayer Wagonseller Hook" is a fair representation of the Ortmayer hooks that you saw on your travels, with reference to the amount of elasticity shown by it?

A. Yes, sir; it is.

CROSS-EXAMINATION BY MR. BANNING.

X-*Q.* 9. Do you know that this hook which you have produced and which is marked "Complainants Exhibit Ortmayer Wagonseller hook" was made by the defendants.

A. No, I don't know that they made it. It come off of a pad bearing their brand.

CHAS. H. CLEAVELAND.

Complainant herewith offers in evidence file and contents of letters patent No. 331813 granted Andrew Ortmayer for improvement in fastening for sweat pads for horse collars, Dec. 8, 1885 and marks the same "Complainants Exhibit Ortmayer file and contents."

At request of defendants counsel, Complainant admits that the catalogues of 1886 and 1887 were distributed generally to the trade.

301 Proofs for final hearing taken on the part of the defendants before Mary F. Seymour, notary public, at the office of the witnesses, respectively, in New York city, October 11, 1886.

Present: James Moore, Esq., of counsel for complainant; Ephraim Banning, Esq., of counsel for defendants.

JOEL JENKINS, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Joel Jenkins; pin manufacturer; representative of the Consolidated Safety-Pin Co. of New York; I reside in Montclair, New Jersey; my age is forty-eight.

Q. 2. Are you familiar with safety-pins and fastening hooks connected therewith? If so, how long have you known them and how extensively are they sold in the market?

A. Well, you can't answer that in one answer. I have been directly connected with safety-pins on and off since 1874 or 1875—1874. They have been used since the thirteenth century, so there is no need of going back. I can show you a list of safety-pins away back in Roman history and at the time of the Spartans.

Q. 3. Is the Consolidated Safety-Pin Company, with which you are connected, engaged in the manufacture of safety-pins with fastening hooks?

A. Yes, sir.

Q. 4. How long has it been so engaged in the manufacture of such safety-pins and hooks?

A. As a company since 1879.

302 Q. 5. In what way were you connected with the business before that time?

A. I was proprietor of a manufactory.

Q. 6. Will you be kind enough to produce and identify some of the safety-pins and fastening hooks connected therewith, which you have referred to, and state how long you have known of their being manufactured and sold in the market?

A. This pin which I now produce has been made thirty-odd years, with the wire hook; it is here shown. It is an English production, made in Birmingham.

The pin above referred to is offered in evidence and marked "Defendants' Exhibit Jenkins No. 1."

The witness produces another pin and says:

This pin was manufactured and has been sold since 1879. It was manufactured and sold by myself before the Consolidated Safety-Pin Company was organized, and since that time has been manufactured and sold in the market by the company.

The pin here referred to and identified by the witness is offered in evidence and marked "Defendants' Exhibit Jenkins No. 2."

The witness produces another pin and says:

This pin has been made since 1877 and sold since that time in the market here in New York.

I was manufacturing this pin at that time, in 1877, in Brooklyn, New York, and continued to manufacture it until the Consolidated Safety-Pin Company was organized, and since then it has been manufactured by the company up to this time and sold generally in the market up to the present time.

The pin above referred to and identified by the witness is offered in evidence and marked "Defendants' Exhibit Jenkins No. 3."

303 (The witness continues:) I have produced a brand of the Spartan shield pin which is now in use by Marshall Field & Co., of Chicago, and which was named the "Spartan pin" in recognition of the old pin of similar form that we were enabled to trace out through history—the pin I refer to as having been used by the Spartans.

The brand of the Spartan shield pin here produced by the witness is offered in evidence and marked "Defendant's Exhibit, Jenkins No. 4."

Complainant's counsel objects mildly to the above, as he does not understand what is meant by it. He does not desire to be understood as objecting so much to the learning of antiquity, but he is mildly in the objective case as to the label in question, because he is thoroughly in the dark as to what is intended by it, and because there is no safety-pin or other exhibit shown in connection with it.

Q. 7. What are these pins and fastening hooks made and used for?

A. They are used for various kinds of connections of different materials. They are not confined to any specific purposes.

Q. 8. How do they operate to fasten and secure two parts or pieces together?

A. It is usually done by the connecting of the pin with one part and the hook with another.

Q. 9. Look at this hook which I now show you and state what it is and how long you have known of its being manufactured and sold in the market.

A. I should say twenty-five years. It is used for various purposes, wherever a hook is required. At the present time they are largely used for drapery, as, for instance, to hang up the curtains in a sleeping car.

The hook here identified by the witness is offered in evidence and marked "Defendants' Exhibit Jenkins No. 5."

304 Q. 10. As I understand you, you say that all these safety-pins with fastening hooks of which you have produced samples, which are marked Defendants' Exhibits Jenkins 1 to 5, inclusive, has been manufactured, sold, and used extensively for a number of years past—the first one as far back as twenty or twenty-five years and the last one as far back as 1879; is all this correct?

A. Yes, sir.

Cross-examination by Mr. MOORE:

X Q. 1. Did you ever know of a sweat pad being attached to a horse's collar or other portion of harness by detachable spring pins of any kind?

A. Yes, sir.

X Q. 2. If you did, state when and where and give the details of such use.

A. It is pretty hard to locate so close as to time instances of that kind. What I have in my mind is where I have been out riding—been traveling long distances with horses—and the horse became chafed on the shoulder, and I have loosened the hames and wound the collar with a woolen cloth and pinned the cross-piece of the cloth with a safety-pin. That practically makes a sweat pad of itself. It raises the collar from the horse. I presume I have done that as long back as in 1856, '57, or '58, along there, because I was at that time engaged in businsss and traveling very much with horses.

X Q. 3. Describe more clearly the character of this cloth, its size and material, that you wound around the collar, how you wound it around, which part of the collar it was wound around.

A. Well, the cloth was simply wound around the collar in any position whereby it would relieve the collar from the surface of the sore on the horse. It might be on the top, it might be on the side.

305 X Q. 4. Do you mean that you wound it transversely around the section of the collar or do you mean that you wound it around the inside of the collar so that it would fit every part of the horse's neck or fit a section of the horse's neck all around?

A. It was simply wound around in a place sufficiently wide to raise the general surface of the collar from the horse—in sections it might be termed.

X Q. 5. In sections around this way (indicating)?

A. Around one section of the collar. I simply loosened the harness and wound it around one section of the collar so as to keep the collar from chafing the horse's neck.

X Q 6. But you have not yet stated what this material was. You may state it now. State whether you went traveling provided to do this in case the horse's neck chafed or whether you happened to find this cloth convenient and the pins convenient when the horse inconveniently chafed.

A. I couldn't state what the material was—whether it was red flannel or white cotton cloth. It is always customary not to put cotton cloth on if you have anything else, but when a man is traveling on the road he has got to take anything he can get hold of in the way of cloth that is suitable for the purpose.

X Q. 7. How long have you been in the safety-pin business?

A. What do you mean—manufacturing or selling?

X Q. 8. Anything.

A. I sold safety-pins as far back as 1855, '54. My business then

This pin has been made since 1877 and sold since that time in the market here in New York.

I was manufacturing this pin at that time, in 1877, in Brooklyn, New York, and continued to manufacture it until the Consolidated Safety-Pin Company was organized, and since then it has been manufactured by the company up to this time and sold generally in the market up to the present time.

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X Q. 7. How long have you been in the safety-pin business?

A. What do you mean—manufacturing or selling?

X Q. 8. Anything.

A. I sold safety-pins as far back as 1855, '54. My business then

was mostly wholesale fancy goods and notions and traveling with horses, with a big wagon, before the railroad times in that section of the country. Safety-pins composed part of my stock. I was in that business from '55 off and on to '68. I began manufacturing in the fall of '76.

X Q. 9. Had you seen this mode of avoiding chafing
306 temporarily adopted upon any prior occasion?

A. Not with safety-pins and a cloth, but I had seen the cloth applied in a similar way and wound with a string as a substitute.

X Q. 10. Who else knew of your use of this cloth upon the horse's collar being secured by safety-pins?

A. I couldn't say as anybody knew, otherwise than people that naturally saw it. Of course that is a good many years for me to make any such statement as that.

X Q. 11. Do you know that there is a man now living that knows that you did make such use of the cloth and safety-pins to save the galled portion of the horse's neck?

A. No, sir; I do not.

X Q. 12. Did it dawn upon you that the accomplishment of this device and the result obtained was of great value?

A. No, sir.

X Q. 13. It does not now appear to you, does it, that it is a thing of immense value and of great practical importance as well as a manufacture as for the convenient preparation of attachable pads and an encouragement tending to overcome the natural idleness of man and thereby benefit the horse?

A. No; not in that way; I wouldn't suppose it was. On second thought I would say it is one of those little things that are capable of being worked up to any amount, like a thousand other little things. You asked that question as a manufacture, as I understand it.

X Q. 14. Whom among your friends did you tell at that time of this expedient to save your horse from being chafed?

A. I couldn't say now that I ever told any one about it.

Redirect examination — Mr. BANNING:

R. D. Q. 1. In how many instances do you recall having thus fastened a horse's collar with a safety-pin?

307 A. I couldn't say how many. I have done it a good many times.

R. D. Q. 2. You are clear in your recollection that you did it at the time stated in your cross-examination, are you?

Objected to as leading.

A. Well, do I understand you that you put the question as to a definite time and spot and place of my making an application?

R. D. Q. 3. No, sir. I simply mean that you are positive in your recollection that you did fasten horses' collar pads in that way at about that time.

A. Yes, sir.

Objected to again as leading and indefinite.

R. D. Q. 4. How long has this pin and fastening hook, marked "Defendants' Exhibit Jenkins No. 1," which you have identified as an English production, been made, sold, or used in the United States?

A. I cannot say how long. Those being imported goods, we have never had but very little experience with them other than to see them in trade. Speaking with an importer a short time ago with relation to the time that safety-pins of that make had been imported, that he could remember about, he made the statement that he had imported those for thirty-eight years.

Objected to as hearsay.

R. D. Q. 5. How long have you seen the goods, do you think, personally?

A. I have seen those goods in this country back as early as '55—that make of pins, that English brand of pins.

R. D. Q. 6. From your knowledge of the art and experience in connection with the safety-pins and fastening hooks would you consider that it would involve invention to use one of those safety-pins and fastening hooks to connect a sweat pad to a horse's collar
308 after it had been used to connect other things in the ways you have above mentioned?

Objected to as incompetent and as being a repetition of the egg illustration.

A. No; I wouldn't.

Signature of witness waived by consent.

Sworn to before me this 11th day of October, 1886.

MARY F. SEYMOUR,
Notary Public, N. Y. C.

GEORGE W. HOLT, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. George W. Holt; age, forty-five; occupation, upholstery hardware merchant; a member of the firm of W. T. Mersereau & Co., 321 Broadway, New York; I live in Brooklyn.

Q. 2. Are you familiar with use of safety-pins having fastening hooks? If so, how long have you known of them in a general way?

A. I am, and have been for some time. We make and sell them and have done so for a number of years.

Q. 3. Please look at these safety-pins and hooks now shown, marked, respectively, "Defendants' Exhibit Jenkins No. 1, Jenkins No. 2, and Jenkins No. 5, and state how long you have been connected with them and in what ways, taking them up in that order.

A. Exhibit No. 1 is almost a fac-simile of our article 327, known

throughout the United States under this number, with this exception, that we simply bend over this wire to hold the pin—the end of the wire—which effects a lodgment for the sharp end of
309 the pin, while this is bent so as to form a shield; otherwise it is precisely the same as ours. These we have sold, I find, as early as March 22, 1880. That is the date I find on our sales book. These have been sold by us in very large quantities. At that time, 1880, there were very few used, it not being strong enough for the purpose, and the number 326, hereinafter mentioned, having a preference with the upholsterers.

Your Exhibit Jenkins No. 2 I have known as H. L. Judd & Co.'s No. 300. I think that we sold those as early as 1883. The exact date I could not say, because we declined orders on them for a long time, as we were not allowed to make anything on them.

Your Exhibit Jenkins No. 3, although with a different shield for the sharp point of the pin, has been known to me and sold by us for the last 3½ to 4 years, because we retired a partner a few years ago, and I know it was made before he went away, and we discussed it in this office. It has since been made by three or four people that we know of. It has been made by T. C. Richards' Hardware Co., of West Winstead, Conn.; by H. L. Judd & Co.; by Turner & Seymour Manufacturing Company. I have bought them from a man—a merchant here—but I don't know whom they represent, so I won't refer to them.

Exhibit Jenkins No. 5 is a fac-simile of our No. 326, lambrequin hook, which is illustrated in our catalogue of 1877 and which we made some time prior to its being shown in that book; how long, whether six months or a year, I am not prepared to say, but we made it some time anterior to that.

Objected to as irrelevant and immaterial.

Q. 4. What are these pins and hooks and fastening devices used for and how are they used?

A. They are used for attaching curtains to the eye of the ring. I here tear out a (see p. 12½) leaf from our catalogue of 1877,
310 which I have identified by my name under this date, on which is an illustration of a hook similar to the "Defendants' Exhibit Jenkins No. 5." This hook is intended to be sewed through the eye to the curtain—the long arm to be inserted through the eye of the ring shown on the leaf referred to, thus attaching the curtain to the ring.

The safety-pins, Exhibits Jenkins Nos. 1, 2, and 3, are used this way: They are pinned to the curtain by the safety-pins and the hook part is then inserted in the pole ring, the same as the hook Jenkins No. 5. I here produce one of our pole rings.

The ring produced is offered in evidence and marked "Defendants' Exhibit Holt No. 6."

Q. 5. How long has your firm been manufacturing picture hooks, and will you be kind enough to produce a sample of your picture hooks?

A. Picture-moulding hooks we have never manufactured. Picture-rod hooks to be used upon round picture rods we have manufactured for the last twelve years; they are made in the shape of the letter "S"; a hook at one end to go over the rod and a picture cord or wire to be secured to the lower part of the hook. I here produce one of these "S" hooks, being our picture-rod hook No. 299, as we have been making them for the last fifteen years.

The picture-rod hook here produced by the witness is offered in evidence and marked "Defendants' Exhibit Holt No. 7."

Q. 6. Has this firm made and sold a picture-moulding hook; if so, how long have you been selling it and will you be kind enough to produce a sample thereof?

A. This is a hook that we have been selling for the last five years, made by J. S. Merrille & Son, of Boston, under their patent of 1877. We knew of its existence before we began to sell them, but
311 did not begin to handle them until about five years ago. This picture-moulding hook is intended to be used in the same way as the picture-rod hook, except that it goes around the moulding instead of the rod; the large part of either hook is always up and passes over the rod or moulding, as the case may be.

The picture-moulding hook produced by the witness is offered in evidence and marked "Defendants' Exhibit Holt No. 8."

The whole of the above deposition is objected to as incompetent, and counsel for complainant declines the cross-examination.

Signature of witness waived by consent.

Sworn to before me this 11th day of October, 1886.

MARY F. SEYMOUR,
Notary Public, N. Y. C.

JULIUS BERBECKER, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Julius Berbecker; age, fifty-three years; occupation, merchant, importer of and manufacturer of brass goods; residence, New York. I am a member of the firm of Julius Berbecker & Co.—Berbecker & Co.

Q. 2. Are you familiar with the use of safety-pins and fastening hooks; if so, how long have you known of their being manufactured and sold in the market?

A. As far as safety-pins are concerned, I never had anything to do with them, but with curtain pins; this here (indicating) is a different thing from a safety-pin. Safety-pins I have never handled, although these are part and parcel of safety-pins—directly of the name of safety-pins I have never handled any.

312 Q. 3. I mean particularly safety-pins provided with fastening hooks?

A. I have known these pins here—the hook as well as the pin—as far back as March, 1877.

Q. 4. Please examine the defendants' exhibits now handed you, marked respectively "Jenkins" Nos. 1 to 5 (except No. 4) and Exhibits "Holt" Nos. 6 to 8, inclusive, and state how long you have known of their being manufactured and sold in the market in this country.

A. With the hook, Jenkins No. 1, I have known as far back as March, 1879, which date I fix by our ledger. Defendants' Exhibit Jenkins No. 3 I have never handled. Defendants' Exhibit Jenkins No. 3—not the exact thing, but something very similar and essentially the same—I handled as far back as about 1880. The only difference between mine and that was in the safety-guard—that is, the shield for the sharp point of the pin. Otherwise they are the same. I have handled the hook, "Defendants' Exhibit Jenkins No. 5," as far back as 1877. We made them here in that year, and we have kept on selling them continuously ever since then. I have handled the rings (Defendants' Exhibit Holt No. 6) as far back as 1873—not exactly the same thing, but a ring that is used for the same purpose. The one that is here seems to be a patent ring. I have seen hooks like Defendants' Exhibit Holt No. 7 further back than 1873; how far back I cannot tell. I have handled them since. We have been making similar articles for the last ten years. I have never handled picture-moulding hooks like "Defendants' Exhibit Holt No. 8," but I have seen it in the market before 1880.

Q. 5. In addition to these safety-pins and hooks referred to in your last answer, have you seen or handled others? If so, please produce samples thereof and state how long you have been selling them or have known of their being sold in the market in this country.

313 A. I here produce two safety-pins and hooks, marked "Walker's patent," which I began to handle, anyhow, as far back as March, 1877; I believe before that, but I cannot be positive. We sold them right along in the market here in New York and in other parts of the country from that time until about four years ago, since which we have been selling other pins, the same as you showed me before.

The two pins and hooks here produced and identified by the witness are offered in evidence and marked "Defendants' Exhibit Berbecker No. 9 and Defendants' Exhibit Berbecker No. 10."

Q. 6. What are these various pins and hooks made for and how are they used?

A. They are used to hang curtains onto pole rings.

Q. 7. And, as I understand you, you say that you have handled them and sold them generally in the market in this country, beginning in 1877 with the first forms and afterwards with other forms down to the present time.

A. Yes, sir.

Q. 8. Have you also known of their being manufactured and sold by other parties or not?

A. Yes; I remembered them as having been made and sold by any number of parties. I could count up eight parties that I know

of having sold or manufactured them: H. L. Judd & Co., Turner & Seymour Manufacturing Co., Benedict & Burnham, Fergusen Bros., W. T. Mersereau & Co., Robert S. Gould, the Consolidated Safety Pin Co., here in New York; Cushman Bros., in Boston. There are others, but they have only gone into it lately.

Counsel for the complainant objects to the whole of the above deposition as irrelevant to the issue and immaterial, and waives cross-examination.

Signature of witness waived by consent.

Sworn to before me this 11th day of Oct., 1886.

MARY F. SEYMOUR,
Notary Public, N. Y. C.

314 Proofs for final hearing taken on the part of the defendants before Frank L. Douglass, notary public, at the office of Banning & Banning, rooms 60 and 61 Honore building, Chicago, October 28th, 1886.

Present: James Moore, Esq., of counsel for complainant, and Ephraim Banning, Esq., of counsel for defendants.

ERVIN SALTSMAN, a witness produced, sworn, and examined on the part of defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Ervin Saltsman; Chicago; forty-seven years old; occupation, dry goods; manager upholstery department of Marshall Field & Co.

Q. 2. How long have you been in your present position in the house of Marshall Field & Co.?

A. In my present position five years and in the upholstery department thirteen years.

Q. 3. Are you familiar with the use of safety-pins having hooks?

A. Yes, I am, and have been for from eight to ten years.

Q. 4. Please look at these safety-pins and hooks offered in evidence in this cause as "Defendants' Exhibit Jenkins No. 1" to "Jenkins No. 3," inclusive, and state whether you have known of the use of similar pins; and, if so, where, how long, and in what way.

Objected to as irrelevant.

315 A. I have known of them—I can't say that I have used these same pins, but the same style of pins—for eight to ten years, and in our business we use them for attaching lambrequins or curtains to the cornice or pole; have used them in Chicago, and more, probably, of this kind—Jenkins No. 3—which I have been using for the length of time stated. They were originally made of heavier wire, but the same hook and pin exactly.

Q. 5. How much heavier was the wire of which you say they were made at first than the wire of which this Exhibit Jenkins No. 3 is made?

Objected to as before.

A. They were originally made of wire a little heavier than the pin part of this Exhibit Jenkins No. 1, and a little lighter than the hook part.

Q. 6. Have you used other forms of safety-pins having hooks in your business in Marshall Field & Co.'s upholstering department?

A. I have. I have used this one which I here produce as a lambrequin pin for a year and a half, but I have known of the pin for a longer time. I have known of its existence for two or three years; I cannot state positively.

The pin here produced by the witness is offered in evidence and marked "Defendants' Exhibit Saltsman No. 11."

Said exhibit objected to as being irrelevant and immaterial.

Q. 7. Please state just how these lambrequin pins you have referred to, and particularly those like the Exhibit "Jenkins No. 3," are applied and used in connection with lambrequins.

Objected to as irrelevant and immaterial.

A. They are all used in the same general way. They are used for the purpose stated, for attaching the lambrequins to the cornice or poles. The pin portion is attached to the edge of the lam-
316 brequin or curtain more especially—they are used more for curtains—in the ordinary way of passing the pin through the cloth or material and securing its pointed end in the shield. When curtains are attached to poles there are rings on the poles, and in those rings are screw-eyes, and the hook portion simply runs through the eye. When fastened to cornices they sometimes fasten a tape along the cornice, to which rings are attached, but more generally the same screw-eye is used.

Q. 8. Then, as I understand your description, the curtain is hung or secured to the pole or cornice by means of the hook portion, the pin portion being first secured thereto in the way above described. Is this correct?

A. That is correct.

Q. 9. Please look at this horse-collar pad offered in evidence in this cause as "Complainant's Exhibit Defendants' Manufacture" and state whether you understand how it is intended to be secured to the collar.

A. I do. This hook is to slip over the edge of the collar.

Q. 10. You mean over the small or front roll of the collar, do you not?

Objected to as leading.

A. I do.

Q. 11. From your knowledge of and acquaintance with the use of safety-pins and hooks like Defendants' Exhibit Jenkin's No. 3 for curtains would you consider that it required anything more than the simple mechanical skill of an ordinary person familiar with the use of such pins and hooks to apply and use them as a fastening device for horse-collar pads?

Question objected to, first, because it is leading; second, because it has not appeared that the witness is qualified to express an opinion upon this subject; and, third, because defendants are stopped by their pleadings from making such defense.

317 A. I should say that a person familiar with the hooks used for curtains, and also familiar with horse-collar pads, might get the idea of the use on one from the other.

Q. 12. Would you or would you not consider pins and hooks of the general form shown in Defendants' Exhibit Jenkins No. 3 as practical and capable of being used as fastenings for horse-collar pads if they were made of somewhat larger wire—say wire substantially as large as the hook of the Complainant's Exhibit Defendants' Manufacture?

Objected to as leading and incompetent.

A. I should say they would be practical for such purpose, providing the hooks were bent to fit the roll on the collar.

Q. 13. Do you consider that anything more than the mere mechanical skill of an ordinary person familiar with the manufacture and use of such pins and hooks would be required to make them of the size suggested in my last question and to bend the hooks to fit the roll of the collar as suggested in your last answer?

Objected to as leading and incompetent.

A. An ordinary person like myself could get the idea of making the hook, but should think it would require a mechanic to do the work. I couldn't do the work. I should think any mechanic accustomed to the use of tools employed in this class of work could make the hook. I would be mechanic enough after the hook was made to bend the hook to fit the roll on a collar.

Q. 14. How long have you known of the use of hooks for hanging up curtains in sleeping cars, which, as you will remember, pass directly over the pole extending lengthwise of the car?

A. I couldn't state definitely the time, but it's a number of years.

318 Q. 15. Please state it as definitely as possible.

A. Five years and more.

Cross-examined by Mr. MOORE:

X Q. 16. You say, substantially, that a person familiar with the use of safety-pins for use for curtains, if familiar with the use of horse collars, might get the idea of the use of the hook shown in defendants' manufacture. Don't you mean that if the problem were first stated to such a person—can you adapt a hook of wire so that it "can be secured to a pad and at the same time grasp and hold the role of a horse collar"—or do you mean that any man skilled in safety-pins and familiar with horse collars would necessarily produce that device?

A. I don't say that every man would get the idea of the adaptation of the hook to the use stated on the horse collar, because some men never have ideas of their own, but work out those of others.

X Q. 17. Did you ever take a patent on a safety-pin?

A. No, sir.

X Q. 18. Did you ever take a patent on any device?

A. No, sir.

X Q. 19. As I understand the comparison you meant to draw between the old safety-pin and the hook attached to defendants' manufacture, and the opinion you meant to express, it is that, looking now at these two sets of devices, you would infer that a mechanic who was familiar with the safety-pin art, and also with the use of horse collars, could if the problem were stated to him, "could you make a device that would detachably secure a sweat collar to a pad"—would probably accomplish that result. Am I right in this?

A. You are wrong.

X Q. 20. Then do you mean that such mechanics would necessarily arrive at that result?

319 A. I don't mean that all mechanics would arrive at that result even if familiar with the safety-pin and collar.

X Q. 21. Well, do you mean, then, that such mechanic, having the knowledge heretofore stated, could accomplish that result upon that problem being presented to him, and that he could also accomplish it without the problem being presented to him as the result of the necessity for the thing that he had discovered from his own experience or observation? If this be not right please make it right.

A. I meant just what I said in answer to question eleven, and I now say that a practical man acquainted with the curtain hook and also with sweat pads would get the idea that a hook similar to the curtain hook could be used for fastening the sweat pad to the collar.

X Q. 22. Yes; I know that you have stated that a practical man could do it, and you have also stated that some practical men could not do it. What I want to get at is under what circumstances, in your opinion, would a practical man accomplish this result? You have stated that he could do it upon the problem being presented to him; you have also stated that he could do it without the problem being presented to him; and the point of the last question was under what circumstances such mechanic would accomplish this result without having the problem stated to him, and, in other language, I will state the question again: Must not such a mechanic have been first convinced of the necessity of such a device, and must there not have been some other element or influence to call to his attention the fact that a safety-pin could do it before he could accomplish it?

A. I would say that there must have been a necessity for this pin or the idea would not have come to him. As to an element of influence to call his attention to it, I should say not necessarily.

X Q. 23. Well, then, it is your idea that the fact that
320 there was a necessity for such a device is sufficient to induce any such skilled and experienced mechanic to produce it without the aid of any happy thought or suggestion or other influence; is that right?

A. I would answer to that I would consider the idea "a happy

thought," but there need not have been any suggestion from any other person.

X Q. 24. That is to say, the happy thought may have occurred to the person who produced the hook on Complainant's Exhibit Defendants' Manufacture, or it may have occurred to some person else, who suggested it to the person who embodied the happy thought in the device in question. Does that correctly represent your meaning?

A. That's it; yes, sir.

Redirect examination by Mr. BANNING:

R. D. Q. 25. By "a happy thought," as used in your answer to cross-question 23, you mean an understanding of the necessity or object aimed at, I take it.

Question objected to as leading.

A. Yes.

R. D. Q. 26. You have stated you are familiar with the use of safety-pins for curtains. I will ask you whether you consider the wire hook of the Complainant's Exhibit Defendants' Manufacture, which is intended to pass over the front roll of the collar, as in any sense a safety-pin, this term being here used as a general designation for pins of this kind referred to in your direct examination, or others in which the pointed end is intended to be held or retained by a shield or other suitable portion at or near the same.

A. I would say not. I would not consider this hook on Complainant's Exhibit Defendants' Manufacture a safety-pin.

321 R. D. Q. 27. From your knowledge and experience in connection with the use of safety-pins having hooks would you consider that if the ends of the wire forming the hook of Complainant's Exhibit Defendants' Manufacture were inserted directly into the cloth forming the covering of the pad it would form a useful or practical attachment or not?

A. It might be useful, but I doubt the practicability of it; it would tear the cloth, in my judgment.

R. D. Q. 28. Then if it would operate to tear the cloth in this way would it be a useful attachment for ordinary use?

Objected to as incompetent, it not appearing that the witness has had any experience in the use of such articles.

A. I would still consider it useful, but should think it would be a nuisance to those using it by tearing, as when torn from the cloth it would necessitate again fastening in a fresh place.

Recross-examination by Mr. MOORE:

R. *D.* Q. 29. I will call your attention again to the first question in redirect, and will ask you if, upon reflection, the "happy thought" referred to in your cross-examination did not have reference to the adaptation of means to an end. In other words, is it not too obvious for discussion that if a pad of this kind was used without a readily detachable fastening to a collar that the most ignorant teamster

would feel the inconvenience of the want of some such fastening, and that it was not with reference to that feeling of inconvenience that you used the language "happy thought," but that you did use it as expressing the idea or conception that from a safety-pin the device in question could be produced?

A. I used it in the way that I would consider it a happy thought to get the idea of the one from the other.

ERVIN SALTSMAN.

322 CHARLES P. PARISH, a witness produced, sworn, and examined on behalf of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Charles P. Parish; thirty-seven years; merchant in cabinet hardware and upholstery goods; No. 4717 Kimbark avenue, Hyde Park, Illinois.

Q. 2. How long have you been in such business, and what is your firm name?

A. The firm name is Gibson, Parish & Co.; established January 1st, 1882, under that style. I have been in the business upwards of fifteen years; prior to that time I was in the employ of Field, Leiter & Co. and Marshall Field & Co., their successors.

Q. 3. Are you familiar with the use of safety-pins having hooks? If so, how long have you known of their use, and where and in what ways?

A. I have known of the use of safety-pins for twenty-three years in connection with the nursery. That is the only use I know of their being put to.

Q. 4. You are now speaking of diaper pins?

A. Yes, sir.

Q. 5. How long have you known of the use of pins having a shield or bent portion to hold the pointed end, and also having a hook portion capable of passing into or over anything to which it is desired to attach the thing in which the pin proper is inserted?

A. I cannot state the exact length of time, but I should say for a period of thirteen years, as near as I can recollect.

Q. 6. Please go on and describe such pins and hooks, referring to any of the exhibits now before you or not, as you may desire.

A. I can best describe the pin by stating that the one I have bought and sold the most of and which is most used is known
323 as "No. 327" by the trade generally. These two pins, Jenkins No. 1 and Jenkins No. 3, represent the style which has been most generally used. I couldn't state positively which of the two I handled first, but my impression is that Jenkins No. 1 was the first introduced, and that Jenkins No. 3 has been used more of late years. I can't state the exact time I have used Jenkins No. 3, but, to the best of my recollection, that pin has been in the market for about ten years.

Q. 7. Please state what these pins and hooks are used for, and how they are used.

A. These pins are used for hanging up draperies, such as lambre-

quins, portieres, and lace curtains. The manner in which they are used is by inserting the pin into the drapery and then passing the hook through a little eyelet or screw-eye in a ring which is attached to a cornice pole or cornice.

Q. 8. Have these pins and hooks, as you have used them, always been made of the same-sized wire as that from which these exhibits are formed? Answer with particular reference to Exhibit Jenkins No. 3.

A. They have not. The first pins made were made of considerably larger wire, and the general shape of the pin was larger than Exhibit No. 3.

Q. 9. Please look at this horse-collar pad offered in evidence in this cause as Complainant's Exhibit Defendants' Manufacture, and state if you understand how it is intended to be secured to the collar.

A. I never saw one of them in use or attached to a collar, but from looking at this pad and the way in which these hooks are attached I should say it was the intention for the hooks to fasten around the roll or edge of the collar.

Q. 10. From your knowledge of and acquaintance with the use of pins and hooks like Defendants' Exhibit Jenkins No. 3, would
324 you consider that it required anything more than the ordinary skill of an ordinary mechanic familiar with the use of such pins and hooks to apply and use them as an attachment for horse-collar pads?

Objected to as leading and incompetent.

A. I should not.

Q. 11. State what changes, if any, would be necessary to make it into a fastening for horse-collar pads.

Objected to as before.

A. First, it would require a larger wire, and then omitting the twist in the hook and cutting the wire off where it changes into a pin is all the changes necessary, or it could be done with that twist in the hook. It would be done over a form or block, although that could be done by hand.

Q. 12. You mean by "cutting the wire off where it changes into a pin" to make a hook fastening substantially like the one contained in the Complainant's Exhibit Defendants' Manfacture, do you?

A. Yes, sir.

Q. 13. Could or could not the pin, as shown in the Defendants' Exhibit Jenkins No. 3, be inserted and secured directly to the pad in the same way as you say it is inserted in and secured to a curtain?

A. It could. It could be attached to any fabric.

Q. 14. Then, unless it should be desired to form a hook of the kind contained in the Complainant's Exhibit Defendants' Manufacture, would it be necessary to cut off the wire at all in order to make this Exhibit Jenkins No. 3 into a fastening for horse-collar pads?

Objected to as obscure and irrelevant.

A. It would not.

Q. 14½. Then in such case would it be necessary to do anything more than to make the hook and pin of larger wire and per-
325 haps slightly change the curvature of the hook portion in order to adapt this Exhibit Jenkins No. 3 to the purposes of a fastening device for horse-collar pads?

Objected to as leading and incompetent.

A. It would not.

Q. 15. Would anything more than the ordinary skill of an ordinary mechanic, familiar with wire-working, be required to make any or all the changes specified in your last five or six answers, say beginning with the one to question 11?

Last objection repeated.

A. It would not, in my judgment.

Q. 16. Do you consider the wire hook of Complainant's Exhibit Defendants' Manufacture as in any sense a "safety-pin," even giving this term a broader meaning than you have heretofore given it and in this way making it apply to any and all kinds of pins which can possibly be included in any proper meaning which may be given to it?

A. I should.

Q. 17. In what sense?

A. Well, I should consider it such in the way it is applied. It is applied to the pad to keep it in place and prevent the collar from chafing the horse, and it is also applied to keep the pin from hurting the horse. It is applied in a safe condition, thereby making it a safety-pin; or it might better be called a hook.

Q. 18. Is it a safety-pin in the sense in which any of these exhibits before you, as for instance Jenkins No. 1 and 3, are safety-pins?

A. I should say not.

Q. 19. From your knowledge and experience in the use of pins having hooks in connection with drapery would you consider that the ends of the wire forming the hook of Complainant's Exhibit De-
fendants' Manufacture could be inserted directly into the cov-
326 ering of the pad in such a way as to form a useful or practical attachment therefor or not?

A. I should say not, as now constructed. I don't see how it could be securely fastened, if I understand the meaning of your question. If you were to insert this in the pad and not fasten it it would be apt to pull out and not be a useful attachment.

Q. 29. Please look at figure 2 of the drawings of the Scherling patent sued on in this cause, No. 298,626, and state whether or not the same is true as to the form or device therein shown.

A. It wouldn't be true in the same measure, for the reason that the projecting prongs of figure No. 2 are much longer than those shown in defendants' manufacture. The leverage or staying powers in figure No. 2 would be much greater.

Q. 21. Then you would consider that the prongs e^1 of Scherling's figure 2 might be sufficient to enable the device to be attached by

their being inserted directly into the pad covering, while an additional or supplemental device, as, for instance, this folded leather, would be necessary in the use of the hook contained in the defendants' manufacture? Am I correct in thus understanding you?

Objected to as leading and as misrepresenting the testimony of the witness.

A. Yes, sir; you are.

Cross-examination by Mr. MOORE:

X Q. 22. Are you a mechanic?

A. No, sir.

X Q. 23. Have you had any experience in getting up mechanical devices or in handling them?

A. Not in getting them up. The only experience I have had is in selling them.

X Q. 24. Of the various respondents' exhibits of safety-pins
327 and of drapery pins that have been exhibited to you, which comes nearest in form to the hook shown in Complainant's Exhibit Defendants' Manufacture?

A. The Jenkins No. 3, I should say, would be the nearest.

X Q. 25. Have you had much experience in taking care of horses, especially draft horses?

A. I had six years' experience on a farm.

X Q. 26. Do you use pads to protect the shoulders of your horses from the collars?

A. No, sir.

X Q. 27. Did you never have any experience of the collar so chafing the horse as to suggest some remedy for it?

A. Yes, sir.

X Q. 28. Well, describe your experience of what you adopted as a remedy.

A. We usually adopted one of two remedies—either to drop the use of the collar, using the breast collar instead, or by laying a horse off until the sore became healed, and then adopt a collar that would more perfectly fit the horse.

X Q. 29. Did it ever occur to you that a softly stuffed pad, if placed between the collar and the horse's shoulder, would have been an effectual preventative of this chafing, and thus have saved the horses from pain and yourself from the inconvenience resultant from the loss of his service?

A. It might have suggested itself, but I have no recollection that such preventative was used at the time. My experience dates back nearly 25 years ago, when I was comparatively a boy, and I did not give those matters my personal attention.

X Q. 30. But, so far as you then knew or now know, this inconvenience that you have described did not suggest to any one of your family or to neighboring farmers the adoption of the remedy above suggested, did it?

A. According to my recollection, it did not sufficiently to cause us

to adopt it. We looked for a remedy in changing the shape of the collar and by having it better padded.

328 X Q. 31. Upon the assumption that such pads were not then known, do you think that a man inventing one would have made a patentable invention or is it your opinion that it would have been "merely the ordinary skill of the ordinary mechanic"?

A. I should say they could be considered in both lights—that is, the invention could have been patented and still have been the product of the mind of the ordinary mechanic.

X Q. 32. Still if you had been called to testify in a patent suit based upon a patent for such a pad you would have stated, would you not, that such a pad, considering the resemblance to the soft roll of a horse collar, only involved the ordinary skill of an ordinary mechanic?

A. I probably should.

Adjourned to October 28th, 1886.

OCTOBER 28—9 a. m.

Parties met as before.

X Q. 33. The passage from the safety and drapery pins to the hook shown upon Complainant's Exhibit Defendants' Manufacture, you have already stated, involved the ordinary skill of the ordinary mechanic. What I desire to ask you in that connection is, is it in accordance with your opinion that this change involves patentable invention or not?

A. Well, I am not sufficiently posted in patent law to give that question an intelligent answer, but what little experience I have had my observation would justify me in believing that the same could be patented, but in my opinion it would be a patent that could be easily overturned.

X Q. 34. Where you have used the language throughout your deposition as applicable to any device considered, that it was within the "ordinary skill of the ordinary mechanic," have you meant to say whether any such device did or did not involve invention or did you only mean that the thing shown could be made by

329 the ordinary skill of the ordinary mechanic?

A. I meant that the device shown could be made by the ordinary mechanic. It didn't necessarily imply invention in the sense of having it patented, although it might be a patentable article.

Redirect examination by Mr. BANNING:

R. D. Q. 35. Assuming this distinction, please answer whether making the changes, if any, necessary to adapt the pin and hook, Defendants' Exhibit Jenkins No. 3, to the purpose of a fastening for horse-collar pads, as mentioned in your direct examination, would involve invention or anything more than the ordinary skill of the ordinary mechanic familiar with wire-working, that "invention" involves some exercise of thought or ingenuity in addition to the mere exercise of skill as a mechanic, while "mechanical skill" will enable a mechanic familiar with his work to make the new form or

product, as occasion may acquire, by considering or inferring from what has been done that the thing desired can be done in substantially the same way, or, in other words, that mechanical skill involves no special thought or ingenuity above that ordinarily exercised by ordinary mechanics in the making of such changes or new forms as may be required in their work; also bear in mind that a thing involving mere mechanical skill is not patentable.

Question objected to as incompetent, first, because the witness has stated that he is not qualified to judge as to what is or is not invention; and, second, that the above effort to instruct him in this regard is misleading in that it does not call his attention to what is the germ of every invention, to wit, the conception or happy thought that a certain means will remedy a known evil.

A. In my judgment it would not.

CHARLES P. PARISH.

330 PETER SEYL, a witness produced, sworn, and examined on the part of the defendants, testified as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Name, Peter Seyl; age, thirty-seven years; manufacturer of small machinery and models; residence, 13 Lincoln avenue, Chicago.

Q. 2. Are you familiar with the manufacture and use of springs, hooks, and so forth?

A. Yes, sir. We have made all sorts of hooks and springs since I have been in business, which has been about twenty years.

Q. 3. Please examine the drawings of the three patents sued on in this cause, Nos. 259,700, 267,011, and 298,626, and also the drawings of the Andrew Ortmayer patent of December 8, 1885, No. 331,813, and state whether or not you understand the fastening devices—that is to say, the springs and hooks shown therein respectively.

A. Yes, sir.

Q. 4 Please examine the wire hook forming a part of the Complainant's Exhibit Defendants' Manufacture and the flat steel spring attached to this other sweat pad for a horse collar, which I now hand you, and state whether you find these fastening devices illustrated in the drawings of any of the four patents referred to; and, if so, in which ones.

A. I find the spring in McClain patent 267,011, and the hook I find in A. Ortmayer patent No. 331,813.

Q. 5. The spring which you here refer to as shown in the McClain patent No. 269,011 is the flat steel spring attached by two rivets to the sweat pad which I handed you, as stated in question 4, is it not?

A. It is.

331 The sweat pad referred to and which the witness speaks of as containing the McClain spring shown in patent No. 267,011 is offered in evidence and marked "Defendants' Exhibit McClain's Single-Roll Spring."

Q. 6. Are you familiar with the way in which wire hooks of the

kind attached to the Complainant's Exhibit Defendants' Manufacture are made and used?

A. I am.

Q. 7. Please state whether such hook is in any sense a spring or whether it is the same in practical operation as either McClain's two-roll spring shown in his first patent or his single-roll spring shown in his second patent, answering from your practical knowledge and acquaintance with the manufacture and use of wire hooks and steel springs.

Objected to as leading and irrelevant.

A. I find in the McClain, in the first and second patents, a double and single roll spring. In the A. Ortmayer patent I find a hook bent out of wire, bent in a form that it is impossible to get any spring out of it. I also took one of the hooks, straightened it out, bent it in a very sharp angle in a vice to see if there was any spring in the wire, but found the wire almost as soft as iron wire.

Q. 8. Please go on and answer that part of my question which has relation to the use of these several devices.

A. I find the spring by fastening onto the collar has to be sprung open and attached that way, and it is fastened with two rivets solid to the sweat pad. The A. Ortmayer hook works on a hinge and can be hooked onto the collar without any spring or give to it.

Q. 9. If the McClain fastening had no elasticity or springing capability, would it be possible to use it in the way here shown?

A. It would be impossible to use it in the way here shown, because you could not hook it over the collar.

332 Q. 10. As constructed and used, is there any occasion for any elasticity or springing capability in the Ortmayer hook, as shown in Complainant's Exhibit Defendants' Manufacture?

A. There is no spring in the Ortmayer hook, as there is in the McClain spring.

Q. 11. But you do not seem to have gotten the exact point of my question, which is whether any elasticity is needed in the Ortmayer hook when constructed and used in the way here shown.

A. I stated before that there is not any elasticity needed in the A. Ortmayer hook, and it can be operated without any elasticity.

Q. 12. In the McClain spring contained in the Defendants' Exhibit McClain Single-Roll Spring the free end of the flat steel comes around to about the diametrical center of the partial circle formed thereby to grasp the front roll of the collar, while the corresponding end of the Ortmayer hook is about or quite the same distance from its opposite side as every other part after the curve. I do not speak from actual measurement in either case. Please state why this difference exists.

A. If there was only as little opening on the Ortmayer hook as there is on the McClain spring it would be impossible to hook it onto the collar.

Q. 13. I understand you to have already answered what I am now going to ask, but, in order to make the matter perfectly clear, I will ask you to state again whether or not the Ortmayer fastening is in

any sense a spring, as that term is understood in mechanics, and whether or not it operates as a spring in the same way that the McClain fastening does.

A. The Ortmayer fastening is nothing but a wire hook, and can be operated without any spring, while the McClain spring could not be operated without having any elasticity to it.

333 Q. 14. Then, as I understand you, the McClain fastening is a spring both in construction and operation, while the Ortmayer fastening is not a spring either in construction or operation. Is this correct?

Objected to as leading.

A. That is correct.

Q. 15. Assuming that the McClain single-roll spring, described in his patent No. 267,011, is substantially the same as that part of the McClain two-roll spring shown in his patent No. 259,700, which is intended to clasp the front roll of the collar, would you consider that anything more than mechanical skill was required to cut the two-roll spring in two, say, at a point about over the reference letter P of figure 3 of the drawings of the patent last mentioned?

Objected to as incompetent.

A. It does not take any more than mechanical skill to cut the double spring, McClain patent No. 259,700, and punch in another hole for a rivet, and it will be a single spring as in his patent No. 267,011.

Q. 16. Please state whether or not the ends of the wire forming the Ortmayer hook are capable of being practically inserted directly into the pad covering and thus fastened thereto.

A. They could be inserted into the sweat pad, but would not be practical to be used that way.

Q. —. Then, taking this Ortmayer hook, as constructed and intended to be used, do you consider that an additional or supplemental device is necessary in order to fasten it to the pad?

Objected to as irrelevant and immaterial.

A. It is necessary in order to make it work practically to have another device in order to fasten it to the sweat pad.

Q. 18. What is the other device which you refer to?

334 A. It can be a piece of leather with a slot in it, bent and fastened to the sweat pad so the hook can work in it like a hinge, as shown in Complainant's Exhibit Defendants' Manufacture.

Q. 19. Please look at figure 2 of the Scherling patent sued on in this cause and state your views in reference to the practical utility of the device therein shown as a fastening for horse-collar pads.

A. As much as I can see from figure 2 in Scherling's patent the ends of the hooks are sharp like a pin and have to be stuck into the sweat collar, which I think is not practical for use.

Cross-examination by Mr. MOORE:

X Q. 20. You have stated that you were familiar with these fast-

ening devices and their use. How did you acquire this experience and knowledge?

A. When I first made the sample hooks some time ago I found out from Mr. Ortmayer what they were going to be used for.

X Q. 21. Prior to the making of this sample hook did you know anything about devices for this purpose?

A. Not before that.

X Q. 22. When did you make this sample hook and for what did you make it?

A. I made these sample hooks some years ago. They were made for to fasten the sweat pad to the collar for a fastening.

X Q. 23. Can't you state more accurately than this when they were made?

A. I might be able to find from my books just when they were made.

X Q. 24. I don't want to know the exact day; I want to know the year and, as nearly as possible, the month.

A. As near as I can remember, it was probably about two or three years.

X Q. 25. You were experimenting for Mr. Ortmayer, were you not?

A. Yes, sir.

335 X Q. 26. About how long were you engaged experimenting before you got a hook that was satisfactory to Mr. Ortmayer?

A. It did not take very long to make the hook in the proper shape. As much as I remember, Mr. Ortmayer bent one himself in the rough to show the idea how the hook had to be made.

X Q. 27. Well, what did you have to do or what did you do with reference to it?

A. We made several hooks for him for sample to show the manufacturer how to make them.

X Q. 28. Well, was the first you made satisfactory to Mr. Ortmayer, or did you have to make others before he was satisfied?

A. I think the first hooks we made were satisfactory.

X Q. 29. When Mr. Ortmayer came to you first did he show you any picture of the desired hook, or did he make a pencil sketch while there of the required form or hook?

A. He either brought a hook there which he bent or bent one himself at my place in the rough, to show me how to make them.

X Q. 30. This hook that he bent in the rough, did it show the form of his present hook?

A. It showed the form of the present hook, but was not bent evenly.

X Q. 31. Well, couldn't the parties who were to manufacture them as merchandise have bent it evenly for him, or understood from it how to make the hooks, without his getting the aid of a professional experimenter?

A. A manufacturer wants to have always an exact sample of what they have to make, and do not bother with a single or a dozen pieces which have to be made by hand.

X Q. 32. Then the purpose, as I gather from your statement, of Ortmayer's going to you was to have you straighten out his kinks and make the loop more uniform. Is that it?

336 A. I did not do anything to the hook that Mr. Ortmayer made. He only made it to show us the idea of what he wanted.

X Q. 33. Then it was to make another just like Ortmayer made, except that the kinks in his should not appear in yours, and yours would be more regular?

A. Yes, sir.

X Q. 34. Did he bring a horse collar and pad there for you to adapt it to or did he just tell you to make the size of the one he made?

A. He gave me the size and told me what the hook was going to be used for.

X Q. 35. Did he tell you it wouldn't do to have the ends pointed to stick into the pad, or what did he say upon that subject?

A. He did not mention anything upon that subject.

X Q. 36. You didn't know, did you, when you made those samples, how they were going to be fastened to the pad?

A. Mr. Ortmayer told me how they were going to be fastened to the pad when we bent the hook.

X Q. 37. You heard nothing more about such hooks from that time up to a few days ago, did you?

A. Some time ago Mr. Ortmayer came to me and told me to make a hook out of a solid piece of steel, saying that some parties claimed that his wire hook was a spring.

X Q. 38. Well, what did you do in pursuance of that request?

A. Well, we made two of the hooks—two or three; I don't remember.

X Q. 39. Well, what kind of hooks, and of what material?

A. They were made of steel, pretty thick, so they wouldn't bend or give way. They were bent in about the same shape as the Ortmayer hooks.

X Q. 40. Well, do you mean that they were thicker or of different material from the sample attached to Complainant's Exhibit Defendants' Manufacture?

A. They were bent out of about $\frac{1}{8}$ x $\frac{3}{4}$ steel, I think, in

337 about the same form as the wire hook.

X Q. 41. Then they were not made of wire, were they?

A. They were not.

X Q. 42. Well, did you find that they would spring—operate as springs?

A. They could not be operated as a spring, because the material was too heavy.

X Q. 43. What kind of steel were they made of?

A. They were made out of common sheet steel.

X Q. 44. What was the purpose of making them, anyway?

A. They were made out of that heavy material to show that it can be operated without having any spring to it.

X Q. 45. Well, was the operation satisfactory without having spring to it?

A. I do not know, as when they were made I delivered them to Mr. Ortmayer.

X Q. 46. When was this? State as nearly as you can.

A. I do not know how long ago it is, but should think it is about four or five months.

X Q. 47. Did Mr. Ortmayer then show you any of the McClain patents that you see here to enable you to make the spring by?

A. He did not.

X Q. 48. Well, what did he say to you by way of instruction as to the form of the spring that he wanted?

A. He gave me one of the wire hooks and said to make them the same shape as they were.

X Q. 49. The hook that you made, was it like the hook upon Defendants' Exhibit McClain's Single-Roll Spring or in what did it differ except in thickness?

A. It was bent in the same shape as the Ortmayer hook, not like the McClain single spring.

X Q. 50. That is to say, the hook was more nearly in the form of a circle than the exhibit referred to in the last question. Is that what you mean?

A. No; it was bent more open, and in the form of the Ortmayer hook.

338 X Q. 51. Of what material are the Ortmayer hooks made? I mean his regular manufacture.

A. As much as I can judge, they are made out of common soft steel.

X Q. 52. They are made from Bessemer steel, are they not?

A. I think they are.

X Q. 53. Are you familiar with the practical manufacture of springs made from this material, which are used for bed bottoms, lounges, spring beds, and a hundred other purposes?

A. I am not much familiar with making such springs, but have seen and worked some of the wire what they use for that purpose and found that that wire is much harder and more spring than there is in the A. Ortmayer hook; and I know they make different grades of steel wire; some is as soft as iron.

X Q. 54. Then you don't know that precisely the wire in the Ortmayer hook is the wire customarily used for the making of the coarser quality of furniture springs, do you?

A. I don't think that they could use that kind of wire for that purpose, as it is too soft.

X Q. 55. Do you know that Bessemer steel wire is made with different degress of elasticity, or is it not all alike in this regard, except as different portions of the same roll, because of its earlier cooling, may be harder than other portions?

A. As much as I know about Bessemer steel I think that they can manufacture hard or soft so they can use it for a spring or any other purpose.

X Q. 56. I don't want to know what they can do. I ask what

they do do. Do you or not know it to be the fact that there are not upon the market two different degrees of elasticity of Bessemer steel wire?

A. I several times bought Bessemer steel for some spring purpose; when I came to make the spring out of it found the
339 wire being too soft. I returned it and got other wire the same size, same make, and found that was much harder and could use it to make the springs out of.

X Q. 57. Yes; I know that different rolls of wire will accidentally differ in hardness, and different pieces in the same roll will differ; but the question that I asked is, are there two kinds intended—two different degrees of elasticity intended—in the manufacture of this wire?

A. As much as I know is that they do manufacture Bessemer steel, some for spring purpose and some for other purpose.

X Q. 58. Do you know whether the wire used in the Ortmayer hooks, shown in Complainant's Exhibit Defendants' Manufacture, is Bessemer steel wire, and of the kind usually used for spring purposes?

A. I think it is too soft to use it for a spring.

X Q. 59. Then, according to your general idea, common iron wire would answer for the Ortmayer hook, wouldn't it?

A. Iron wire? Yes; it would, but if you want to make the hook out of iron wire it would have to be made much heavier and would be too clumsy for the purpose it is used.

X Q. 60. Don't you think that lead rolled into the form of wire would answer for the Ortmayer hooks?

A. No; it would not.

X Q. 61. You observe that I push the wires in the Exhibit Defendants' Manufacture so they almost touch, and by their own elasticity they return to their relative positions. Does not this indicate that this wire was made to answer for a spring?

A. I think if you make a hook out of iron wire the same size as this and work it sideways you can get about the same amount of spring out as this one.

X Q. 62. Is that the reason that you say the iron wire
340 would answer to make the Ortmayer hooks?

A. I did not say that iron wire would answer for the Ortmayer hook in that thickness. What I mean is if you make a hook out of iron you can get about as much spring out of it, if you work it sideways, as you can out of this steel hook.

X Q. 63. Do you mean that the working of two different pieces of metal of similar forms sidewise will not illustrate the elasticity of each as well as working them in any other direction?

A. No; it depends altogether in what form and shape the wire is bent in. I can bend the wire in a form to make it very stiff, and if I take the same piece of wire and leave it straight or bend it in another form I can get more spring out of it.

X Q. 64. Yes; but this doesn't answer my question, which I will state again. Suppose two hooks exactly like the Ortmayer hooks be made, but from different materials and with different elastic powers,

won't the bending of each of these sidewise, as you call it, show the relative elasticity of the different metals in these hooks?

A. Yes; it would.

X Q. 65. Then when you say, as you did in answer to question 61, that an Ortmayer hook made of iron wire of the same size will show as much elasticity as one of the Ortmayer hooks of Bessemer steel do you mean that the iron wire (and this means common iron wire) contains as much spring power as Bessemer steel?

A. I did, in the question 61, say there was about as much spring in the iron hook as there is in the Bessemer steel hook. I do not mean common iron wire; I mean good, hard iron wire which is drawn through a die and is very hard and springy.

X Q. 66. Are you willing to swear positively that the Ort-
341 mayer hook does not contain a considerable portion of elasticity or spring power in the direction of the arch or in the way it grasps the roll of the collar? And I ask your attention while answering that question to my fingers as I bend the two ends of one of the hooks together.

A. I cannot find any more spring to the hook by working it that way than I can get out of a good iron hook, and work it in that same way.

X Q. 67. The above question is repeated. The officer will read it to you again; and I wish you to observe that there is nothing said in it about any iron hook or anything else than the Ortmayer hook as made.

A. It does a very little.

X Q. 68. The amount, I suppose, is about the size of a piece of chalk, isn't it?

A. I don't think it is more than $\frac{1}{16}$ of an inch.

X Q. 69. Do you know why Mr. Ortmayer doesn't use common iron wire for this purpose, inasmuch as it is cheaper and the hooks could be made with less labor from it?

A. In making it out of iron he would have to use heavier iron wire than what the steel is, and the material would cost about as much as the steel would, and it would take just as much labor to bend a hook out of heavier iron wire as it does out of the steel wire he is using.

X Q. 70. Would it require cold-drawn iron wire if used as a substitute for the Bessemer steel, and how much thicker would the wire require to be than the steel actually used?

A. It requires the best cold-drawn iron wire. I cannot tell how much heavier the wire has to be, but should think about $\frac{3}{64}$ thicker would answer.

X Q. 71. In your 7th answer you state as follows: "In the Ortmayer patent I find a hook bent out of wire, bent in a form that it is impossible to get any spring out of." You mean by this, I pre-
sume, that the arching of the bows gives very strong resist-
342 ance to their being opened, but you surely do not mean that it is impossible for an arch to spring, do you?

A. It is possible if you bend the arch larger and use the same size wire as there is used in the Ortmayer.

X Q. 72. In answer 9 and a series of succeeding answers you have testified in substance, as I understand you, that where the coupling hook is secured to the pad, according to the method shown in Complainant's Exhibit Defendants' Manufacture, there is less necessity for elasticity in the hook than if the coupling device were secured to the pad by rivets, as shown in the McClain patent No. 2. Am I right about this? And, for a further question, isn't it the swivelling capacity of the Ortmayer hook which enables it, in your opinion, to dispense with some of the elasticity that would be requisite in a hook fastened to the pad with rivets?

A. The Ortmayer hook can be operated with the swivel without having any spring in it. The hook can also be made and riveted to the sweat pad, but would not be very practical to operate it or attach it or detach it from the collar.

X Q. 73. Do you consider this an affirmative or negative answer to my different questions? And they will be re-read to you for that purpose.

A. It is meant as an affirmative answer.

X Q. 74. You say, in answer 15, that it would only take mechanical skill to enable the device shown in McClain patent No. 2 to be made from the drawing of McClain patent No. 1. This, as I understand you, is upon the assumption that one man should say to another, Can you make a spring with a single curve to answer the purpose of this spring with a double curve? But now, suppose that a person was using the double-roll spring for attaching the pad to the collar and had never seen or heard of a detachable fastening for securing the pad to the collar other than a double-roll spring,
243 wouldn't there be another element to come in there before cutting the double-roll spring so as to make the single-roll spring? Wouldn't there have to be a conception or thought that the single-curve spring would answer this purpose before the operation of cutting would be arrived at, and wouldn't this thought or conception that the single-roll spring would answer be something independent of and in addition to the mere dividing of the spring?

A. It takes more thinking and figuring after the double spring is put on the pad to fasten the pad to the collar only with one hook or spring than to go to work and cut a double spring in two and use it as a single spring.

Redirect examination by Mr. BANNING:

R. D. Q. 75. The single-roll spring of McClain's second patent is intended to grasp the front roll of the collar in the same way as the corresponding part of the two-roll spring of his first patent, is it not?

A. Yes; it is exactly the same thing.

R. D. Q. 76. Referring to the last question and answer in your cross-examination, would you consider that it required any particular "thinking and figuring" to know that the single-roll spring would operate to secure the pad to the collar after the issuance of the first McClain patent showing his two-roll spring?

A. I don't think that it should take much time and thinking to

find out that a single spring would answer that purpose, especially for a man who is in the harness business and is manufacturing those pads and springs and collars.

PETER SEYL.

Adjourned till October 30th at 10 o'clock a. m.

OCTOBER 30TH—10 o'clock a. m.

Parties met as before.

344 ELIJAH P. PEACOCK, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Name, Elijah P. Peacock; 49 years; patent-article manufacturer; 147 Clinton street, Chicago.

Q. 2. What particular kind of patented articles do you manufacture—wood, metal, or both?

A. Anything in sheet metal or wire-work.

Q. 3. How long have you been engaged in this business, and in what way have you been carrying it on?

A. Established in 1861, and carried on ever since as sole proprietor.

Q. 4. How large a business are you doing now?

A. I employ thirty-four hands.

Q. 5. Are you familiar with the way in which sheet-metal springs and wire hooks are made and used?

A. Yes.

Q. 6. What experience have you had in connection with such springs and hooks?

A. I have manufactured from 50,000 to 75,000 of such articles in the course of a year.

Q. 7. Are you familiar with the Ortmayer hook used as a fastening for horse-collar pads, as shown in the Complainant's Exhibit Defendants' Manufacture in this cause? If so, how long have you known of it, and in what way?

A. I am familiar with it from the fact I have been manufacturing some for one year or more for Mr. Ortmayer.

Q. 8. Have you understood from Mr. Ortmayer how he desired to have them made and for what they were to be used?

A. Yes; I understood they were to be used on horse collars,
345 and that he wished them made of a material strong enough to stand their shape without bending, so that they should retain the form of the sample he brought over. The sample was the same shape as the hook on Complainant's Exhibit Defendants' Manufacture.

Q. 9. Did Mr. Ortmayer instruct you personally to make them in this way—"of a material strong enough to stand their shape without bending"?

A. Yes.

Q. 10. What do you mean by their being strong enough "to stand their shape without bending"?

Question objected to, and all matters relating to instruction given by defendants to this witness objected to as incompetent, irrelevant, and immaterial, this objection being intended to cover all questions of this character to this witness without further repeating.

A. The material should be strong enough to keep the shape given it, and not give way in any manner when forced over the roll of the collar.

Q. 11. Did Mr. Ortmayer ever instruct you to make them so that they would have some elasticity or capability of springing?

Objected to as leading, as well as for reasons above set forth.

A. They certainly required no spring, or I should have advised him to have used a different material for the manufacture of the hooks.

Q. 12. But what did he direct you to make—a spring or a hook?

A. A hook.

Q. 13. As a matter of fact, speaking from your practical knowledge and experience in connection with such devices, is the pad fastening of the Complainant's Exhibit Defendants' Manufacture a spring or a hook, as these terms are ordinarily understood in mechanics?

Objected to as before.

A. Only a hook.

346 Q. 14. Look at the flat steel spring, forming the "Defendants' Exhibit McClain Single-Roll Spring," and state whether or not the Ortmayer hook which you have been referring to is the same either in construction or operation; if not, please state wherein the two devices differ.

A. It is not the same either in construction or operation. One acts as a spring when forced on the collar, the other clasps it by a hinged motion.

Q. 15. Would it be possible to use the Ortmayer hook as a fastening for horse-collar pads if the extreme part from the ends of the wire—that is to say, the part where the wire passes from one bow to the other—were bent down so as to come as close to the opposite side as the end of the McClain single-roll spring comes?

A. It would be impossible if made from the same material as it is at present made of.

Q. 16. Would it be possible to attach the Ortmayer hook, practically, by inserting the ends of the wire of which it is formed directly into the pad covering, or is an additional or supplemental device necessary to secure it to the pad?

A. It may be necessary for a supplemental device to give sufficient strength to keep the covering from tearing; otherwise it might be used.

Q. 17. But, as actually constructed, could the ends of the wire be

inserted directly into the pad covering far enough to form a secure fastening for practical purposes?

Objected to as leading and immaterial.

A. I think not.

Q. 18. In making these hooks for Ortmayer & Son, have you ever considered that the projecting end portions of the wire were "safety-pins" in any sense in which that term is ordinarily understood in mechanics?

Objected to as irrelevant and immaterial.

347 A. No; not at all.

Q. 19. Has Mr. Ortmayer ever in any way directed you to make them as pins or ever called them pins in his orders or conversations with you relating to their manufacture?

A. Never anything only hooks.

Q. 20. Do you understand the construction and use of this drapery pin which I now hand you, offered in evidence in this cause as Defendants' Exhibit Jenkins No. 3?

A. Yes, sir.

Q. 21. From your practical knowledge and experience in connection with horse-collar pad fastenings, would you consider that any mechanic, familiar with the art and ordinarily skillful, could apply and use this pin as a fastening for horse-collar pads, making such changes as might be necessary to adapt it to this purpose from his simple practical skill as a mechanic?

Objected to as incompetent.

A. Yes; easily.

Q. 22. Look at figure 3 of the drawings of McClain's first patent No. 259,700 and state whether or not anything more than the ordinary skill of an ordinary mechanic would be required to cut the spring in two and punch an additional hole in the part intended to come in contact with the pad so as to make the form of spring shown in the second McClain patent No. 267,011 and in the Defendants' Exhibit McClain's Single-Roll Spring.

Objected to as incompetent.

A. It would require no invention whatever; any ordinary mechanic would readily see it.

Cross-examination by Mr. MOORE:

X Q. 23. Have you made all the Ortmayer springs?

A. I never made any. I made hooks.

X Q. 24. Have you made all the Ortmayer hooks?

A. I believe so.

348 X Q. 25. About how many have you made altogether?

A. I cannot tell exactly.

X Q. 26. I didn't ask you exactly. About how many have you made?

A. Perhaps ten thousand.

X Q. 27. Well, is that your best judgment and recollection as to how many you have made?

A. Yes, sir.

X Q. 28. Before you commenced to make these for Mr. Ortmayer had you ever seen a device for detachably connecting a sweat pad to a horse collar?

A. No.

X Q. 29. When you did commence to make them did Mr. Ortmayer bring a sweat pad and horse collar to you and show you how they would operate, or did he just tell you to make by the sample he furnished you?

A. He furnished me a sample and told me to make them like that, but depended on me for choice of material so as to be stiff enough to retain their shape.

X Q. 30. When did you first see a collar and pad attached together by means of these devices?

A. Day before yesterday.

X Q. 31. Where did you see it and who showed it to you?

A. I seen it in this room; no one showed it to me.

X Q. 32. Did you ever, even up to the present minute, manipulate the collar on the pad to which one of these devices was attached?

A. No; I did not.

X Q. 33. Now, will you swear positively that Mr. Ortmayer, when instructing you to make these devices, told you not to use elastic material in their manufacture?

A. He certainly did.

X Q. 34. Then why did you use elastic material?

A. When formed in the shape of this hook it certainly is not elastic material.

X Q. 35. I didn't ask you anything about the shape of the
349 hook. I asked you why you used elastic material if you were instructed not. Please answer that question.

A. It is not elastic material when made in certain shapes.

X Q. 36. I didn't ask you about the form or shape, but about the elasticity of the material before it was formed or shaped. I again ask you why you used elastic material when you were instructed not to.

A. Form has everything to do with elasticity of all materials; even glass is elastic under certain conditions.

X Q. 37. Do you refuse to answer the question as put—why you used elastic material when you were instructed not to?

A. The material is not elastic when put in this form, as I understand elasticity.

X Q. 38. I told you before and I tell you again that I am not asking about the form or the elasticity of a particular form, but am asking about the elasticity of the material just as you get it and before you form it; and I again ask you why you used elastic material when you were instructed not to.

A. There is no elasticity in this material when formed in certain shapes. The elasticity, as I understand it, only exists in his brain.

X Q. 39. Do you understand the questions or do you not, and answer me? Do you understand that I am asking about the elasticity before it is formed, or do you understand me asking about elasticity in particular forms? Please answer this question.

A. The two go together, form and elasticity. If I take that material and bend in a curve ¼ inch in diameter there is no elasticity if it is only ½ circle; if I take that same material and form a circle 12 inches in diameter there is elasticity, so that, as I understand it, form has everything to do with it. I have given these two extremes to illustrate my point, whether I understand it or not.

X Q. 40. Question repeated and the officer will please re-read the question.

A. I should answer it exactly as I have done.

350 X Q. 41. Then you decline to say whether you understand my questions or not?

A. I think I do, and the answer I have given is entirely adequate.

X Q. 42. But you do decline to answer why you used material which you have admitted to be elastic as material, notwithstanding your instructions not to use elastic material. Is that your position?

A. The choice was given me to use certain material simply for the purpose of retaining its form, and under this shape the material is certainly not elastic as I understand the term elasticity.

By Mr. BANNING: The point of Mr. Moore's questions, I understand it, is not whether the material is elastic when bent in this particular form, but whether it is elastic before it is so bent or perhaps when bent in other forms. Please answer his questions with this understanding, particularly as to whether the material possesses any elasticity before it is manipulated or used in making these books.

X Q. 43. Then, as I understand from your last answer, the instructions you received from Mr. Ortmayer did not expressly refer to elasticity at all, but were only with reference to question of the device keeping its form after manipulation of putting on or off the collar. Is this what you intend?

By Mr. BANNING: In order that the witness may not appear to decline answering I desire the record to show that the last question was put before the witness had time or opportunity to answer after my preceding statement was entered.

Counsel for complainant desires to observe that the foregoing statement of defendants' counsel is to him inexplicable, inasmuch as the fact is, and the record shows, that the witness had given the foregoing answer to the last question before Mr. Banning's first statement or any part of it was entered of record.

351 Mr. BANNING: In view of this I think it proper to explain that my statement was made simply for the purpose of facilitating matters, and because of the counsel's apparent dissatisfaction with the answers of the witness, which to my mind were perfectly clear and intelligible, but which complainant's counsel seemed to regard in a different light, as I judged from his statement made off

the record that his cross-examination would probably last a week unless the witness would answer his questions. I make this statement simply to show why my remarks were interjected, and in order that they may not be inexplicable.

A. Yes.

X Q. 43. Of what material are these hook devices made? By whom or what concern is the material made, and by what name does it go in the market?

A. Bessemer steel wire, manufactured by Washburn & Moen.

X Q. 45. I mean, more particularly, whether it has got any other mercantile designation than Bessemer steel wire, indicating quality, size, &c.?

A. Hard-drawn steel No. 11.

X Q. 46. This is the hardest cheap steel wire in the market, is it not?

A. Yes, sir.

X Q. 47. It has more elasticity, regardless of the form in which it is put, than any other Bessemer steel on the market, has it not?

A. Yes.

X Q. 48. Now, if elasticity, resiliency, or spring power was not desired in these hooks, why did you deliberately select for their manufacture this material?

A. Because, considering the size, it had greater strength than any material in the market to keep its shape, from the fact of its being hard-drawn wire.

X Q. 49. The harder drawn the steel wire may be the more elasticity or spring power it has, has it not?

A. Yes; until the point of breaking is reached.

X Q. 50. Did you ever make an invention and patent it?

A. Yes.

352 X Q. 51. State what it was and refer me to the patent.

A. Three barbed-wire machines, one check-row wire machine, one mortice machine, and one rat trap. I have got others, but I don't remember now.

X Q. 52. Would you think it fair in testing whether those patents showed invention to look at simply the changes of mechanism that you had made from prior devices without taking into account either the happy thought that came before the mere mechanical changes or the results produced in the art by the change?

A. They were original with me and thought out after a great deal of hard work.

X Q. 53. You don't know anything about the state of the art with reference to devices for detachably fastening sweat pads to collars, except that you manufactured these hooks for Ortmayer. Am I right about that?

A. That is all.

X Q. 54. I have understood you to mean that where a hook is attached to a pad by a swiveling or hinge joint that in that case elasticity or spring power in the hook is not so essential. Am I right about this?

A. Yes.

X Q. 55. You understand, of course, that if Mr. Ortmayer should be enjoined in this suit from using these hooks that you would lose the job of making them, don't you?

A. I suppose I should.

X Q. 56. You have known this, haven't you, from the time you heard the suit was pending?

A. No.

X Q. 57. When did you first find it out?

A. A few days ago.

X Q. 58. You also know, don't you, being a patentee yourself, that if Ortmayer is liable for damages for this infringement that you are also an infringer and also liable for damages?

A. I have been in a good many such suits, but I have never paid a cent yet.

353 Redirect examination by Mr. BANNING:

R. D. Q. 59. Your answer to cross-question 57 means that you first heard of the pendency of this suit a few days ago, as I understand it?

A. Yes.

R. D. Q. 60. Has your evidence been in any way influenced by the possibilities of trouble suggested in the last three or four cross-questions?

Objected to as incompetent.

A. None whatever.

ELIJAH P. PEACOCK.

GEORGE ATZEL, a witness produced, sworn, and examined on the part of the defendants, testified as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Name, George Atzel; age, fifty-seven years; harness-maker; No. 106 N. Wells street, Chicago.

Q. 2. In what particular way are you engaged in the harness business and how long have you been so engaged?

A. I have been engaged in it since 1853, in light and coarse harness, both as a manufacturer and dealer.

R. D. Q. 3. Are you familiar with the use of sweat pads for horse collars; if so, how long have you known of their use?

A. We have been using sweat pads as long as I am in the business.

Q. 4. Then they have been used for more than thirty years to your actual knowledge?

A. Yes.

Q. 5. How have they been attached to the collars generally during all the time you have known of their use?

A. I sew them right tight in the collar. I don't know how others do.

354 Q. 6. Have you known of their being secured by straps and buckles or by tie-strings?

A. No, sir.

Q. 7. How do they operate when sewed fast to the collar, as in your manufacture?

A. A sweat collar which is sewn right into a collar will wear longer than any other way, and wear better on a horse.

Q. 8. Have you examined the spring and hook fastening devices used by the parties to this suit respectively?

A. No, no, sir; but I have seen them.

Q. 9. Have you ever considered them of sufficient value or importance to justify your taking hold of any of them in any way?

Objected to as irrelevant and immaterial.

A. No, sir.

Q. 10. How long have you known of any of them in the trade?

A. Well, I don't know; as long as they are in existence, I suppose. I have seen them, and that's all.

Q. 11. So far as your knowledge goes, are they now sold extensively in the trade in comparison with other kinds?

A. I believe they are.

Q. 12. What kind is there now the greatest demands for, if you know?

A. I couldn't say.

Q. 13. Do you find the McClain and Ortmayer sweat pads to seriously interfere with the sale or use of this kind you are manufacturing?

A. No, sir.

Q. 14. Does the sweat pad readily adjust itself to the shape of the collar in ordinary use?

A. Generally; yes.

Q. 15. This being the case, is it a matter of very much importance just how it is fastened to the collar, especially after it has been used a short time?

Objected to because an infringer is estopped at non-utility.

A. It don't make any difference how the collar is fastened.

355 Q. 16. That is, you consider a permanent fastening about as good, or quite as good, as a detachable one in practical use? Is that what you mean?

Objected to as before, and for that it is leading.

A. I believe that a sweat pad sewed into a collar will last as long in use and be better for the horse than when fastened in any other way—better because it does not shuffle up or down.

Q. 17. How often, if at all, does the sweat pad have to be detached from the collar, or taken off, in ordinary use?

A. Not at all.

Q. 18. I assume that you have been talking about sweat pads of the general kind represented by Complainant's Exhibit Defendants' Manufacture and other exhibits now before you. Is this correct?

A. Yes, sir; we have been talking about them—this kind.

Cross-examination by Mr. MOORE:

X Q. 19. How many sweat pads would be worn out during the time that one collar would be worn out?

A. I couldn't tell. I have made sweat pads which lasted as long as the collar. I have made sweat collars that have lasted as long as the collar. It depends on how they are taken care of. Sometimes, if they don't take care of them, they will wear out two sweat pads to one collar.

X Q. 20. When a sweat pad is worn out does the farmer or other user customarily or often bring back the collar to have a new pad put in?

A. That is usually the way.

X Q. 21. Now, what porportion of the collars that you sell with sweat pads are returned for having another sweat pad sewed in?

A. Well, I can't tell.

X Q. 22. About how many sweat pads per year have you sold, with collars, upon an average of ten or fifteen years?

A. Oh, about fifty or seventy-five a year.

356 X Q. 23. Do you mean from fifty to seventy-five sweat pads, each accompanying a new collar, or do you mean fifty or seventy-five a year whether put upon new or old collars?

A. On old collars.

X Q. 24. Then you do not apply sweat pads until the collar has acquired so hard a surface by wear that it is in condition to chafe a horse's neck. Is that right?

A. That is right.

X Q. 25. Do I understand you to mean that you have sewed as many sweat pads into old collars per year since the introduction of the detachable metallic fastenings—that is, during the past four or five years—as you did before that time?

A. No, sir.

X Q. 26. Does the fifty or seventy-five a year which you have stated refer to the period since the introduction of the adjustable metallic fastenings or does it refer to the period prior to such introduction?

A. Before these fastenings came out.

X Q. 27. How many a year of these pads do you make or put in now?

A. We put in from fifty to seventy-five a year; we put in that much right along.

X Q. 27½. For how many years has this been the average?

A. Probably for the last ten years.

X Q. 28. The farmers and other users of draft horses now purchase sweat pads without bringing their collars to the harness-maker's shop to have them sewed in, don't they?

A. Farmers buy the sweat pads and put them on themselves. I am speaking of city trade. I do not deal with farmers.

X Q. 29. Now, these sweat pads with metallic adjustable fastenings are used in connection with new collars as well as with partly worn collars, are they not, or have you any knowledge about this?

A. I presume for some causes, some reasons, yes—sometimes.

357 X Q. 30. Have you any knowledge as to the largely-increased number of such pads that are used since the adoption of the adjustable metallic fastening?

A. No, sir.

X Q. 31. Who was the maker of the first of these fastenings that your attention was called to, and about how long ago was that?

A. Well, I couldn't recollect who it was, because I never took no interest in the fastening, because it wasn't a thing I am using.

GEORGE ATZEL.

Adjourned to November 1, 1886.

NOVEMBER 1.

Parties met, pursuant to adjournment, same as before.

ANDREW ORTMAYER, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence, and whether you are one of the defendants in this cause.

A. Andrew Ortmayer; saddlery business—dealer in saddlery hardware; age, 60 years; residence, 406 Dearborn avenue, Chicago; I am one of the defendants.

Q. 2. How long have you been engaged in the business mentioned?

A. I commenced learning my trade when I was 12 years of age with my father. I have been in the business ever since excepting when I have been off three or four months at a time.

Q. 3. Do you do a wholesale or retail business, and what is the name under which the business is carried on?

A. A. Ortmayer & Son, incorporated. We are in the wholesale business.

358 Q. 4. Do you manufacture or sell horse-collar pads as a part of your business?

A. Yes, sir.

Q. 5. How long have you known of the use of horse-collar pads, and how long have you handled them personally?

A. Ever since I commenced learning my trade. I have been handling them in my own business since 1854, when I commenced business for myself.

Q. 6. Please state how you have been accustomed to attach them or provide for their being attached to the collar proper.

A. The bulk of them have been sold without the attachments. What we attached ourselves were mostly stitched or sewed in. A few. Sometimes a customer wanted us to put on straps and buckles and tie-strings for fastenings.

Q. 7. How were they intended to be used when sold without any special means of attaching them to the collar?

A. As we are selling them to harness-makers only, they would provide for attaching them themselves in their own peculiar way, and some of them are made to be used without fastenings.

Q. 8. How do you mean without fastenings, and how did they work when so used?

A. The pad would be made in one piece or closed at both top and bottom and fitted to the horse's neck—that is, slipped over the horse's head onto his neck—the collar being fit over the pad, size corresponding; and they will stay under the collar for themselves if they are fitted properly.

Q. 9. Are we to understand from this that the pad readily adjusts and fits itself to the collar, so that it will stay in place in use whether actually attached to the collar or not?

A. They do, providing the driver is careful in fitting it right at the start. After a day or two working there is no more trouble; it will stay for itself.

359 Q. 10. In such case can the pad be detached or taken off without unbuckling or loosening the harness?

A. No, sir; no pad could, because it is first onto the horse's neck, and the harness are buckled over tight to hold it.

Q. 11. How long have you been accustomed to attaching the sweat pads to the collars when you have considered it desirable to attach them?

A. To go back as far as I recollect, we put straps on whenever we had a very narrow collar, which takes a narrow pad also, without making it clumsy. We attached them with buckles and straps here, in this country, when I first went into business, in 1854, and a very narrow pad was used. We always tacked them in with long stitches. Since then a great many changes have taken place in making pads. They were used open on top and provided with loops to slip over the collar at the upper end. If used open below straps and buckles are used, and sometimes strings to tie, and within a few years metallic spring and hook attachments have become very popular.

Q. 13. Please state what you mean by "narrow pads" and by loops "slipping over the collar" in your preceding answer.

A. By a narrow pad I mean a pad intended for the body of the collar only, and which only comes out to about the inner edge of the front roll. When I speak of a sweat pad which is opened on top I mean of the general kind represented by the Complainant's Exhibit Defendants' Manufacture. If that pad is closed below and opened on top I have put on loops on each side so as to slip over the upper end of the collar and hold it there. Of course other means can be used.

Q. 14. How long have you known of sweat pads being fastened by tie-strings and straps and buckles?

A. They always have, as long as I can recollect, been used more or less in both those ways.

360 Q. 15. Does your company manufacture and sell them in either of those ways now, and have you been doing so in the past?

A. Yes, sir; we make them and sell them now with straps and buckles without any fastenings and with loops on in some cases. I

use the loop on all sweat pads now excepting those which are stitched in.

Q. 16. How long have you been making them with a wire-hook fastening, as represented by the Complainant's Exhibit Defendants' Manufacture?

A. About a year or a little over. I don't know particularly.

Q. 17. How do you find those different fastenings—say straps and buckles and wire hooks—to compare with each other as to practical utility and as to sales in the market?

A. The pads with hooks are now selling in larger numbers, by preference of the individual buyer, than buckles and straps; but the utility—I consider one as good as another.

Q. 18. Do you still sell large numbers with straps and buckles or not?

Objected to as leading.

A. The expression "large numbers" is very indefinite, as that depends upon how many there are sold. I have partly answered that above, that we still make the buckle and strap fastening and sell them to those who prefer them or to dealers who have to keep both on hand.

Q. 19. But what I mean is whether there are many dealers who still order the pads with straps and buckles.

A. There are quite a number of customers so ordering. Some don't use anything else.

Q. 20. I assume, of course, that it is necessary to loosen the harness whenever it is desired to detach a pad fastened by straps and buckles. How is this with regard to pads fastened with metallic springs, as in the McClain patents sued on in this cause?

361 A. I don't think it makes any difference. I know it don't make any difference. The harness has always got to be taken off before the pad can be taken off.

Q. 21. Do you mean this with reference to McClain's metallic spring fastenings shown in these patents?

A. Yes, sir.

Q. 22. Do you consider, then, that McClain's spring devices possess any special advantages in this respect over other fastenings previously in use, as, for instance, straps and buckles?

A. No, sir.

Q. 23. When did you first learn of the McClain and Scherling patents sued on this cause, and particularly when did you first hear that McClain considered your hook fastening in question to be an infringement thereof?

A. I never have heard of this first McClain patent being in use at all. When my attention was first called to the McClain spring clasp device the device shown in his second patent had been in use. I do not recollect exactly when that was, but will say it may be between two and three years. It may not be over two years. I heard, by way of conversation, that L. D. Randall & Co., Dubuque, Iowa, had a safety-pin fastening to a collar pad and would bring them into the market on sale, I should think, a year and a half ago; but of the

Scherling patent itself I had first my attention called to it by Mr. McClain about a year ago. I had just about begun to manufacture at the time. I first heard that McClain considered my fastening an infringement of his patents at the time he first notified me of the existence of the Scherling patent. I mean to say that I inferred from his letter that he believed I was infringing, although he did not express it in a direct way.

Q. 24. Then did you or did you not make your hooks of
362 the form shown in the Complainant's Exhibit Defendants' Manufacture before you ever saw the Scherling patent sued on in this cause?

A. I did. I mean that my application had been in Washington three or four months before I saw the Scherling patent.

Q. 25. Do you mean your application for patent No. 331,313, issued to you December 8, 1885?

A. Yes, sir.

Q. 26. Is this the patent under which you are manufacturing these pad hooks?

A. Yes, sir.

Q. 27. When you first heard that L. D. Randall & Co. were about beginning the manufacture of a safety-pin fastening were you informed as to its particular construction?

A. No, sir. I thought, by the language "safety-pin," that I understood what it was without any further inquiry.

Q. 28. Were you at that time or afterwards, before you began to manufacture, informed of the special form of device shown in figure 2 of the Scherling patent?

A. None whatever.

Q. 29. Have you ever heard or known of the manufacture, sale, or use of pad-fasteners of the form shown in said figure 2 of the Scherling patent?

A. I don't think there ever were any made. I never saw or heard of them. From conversations with my salesmen I know that the form shown in figure 1 was manufactured and put in market by L. D. Randall & Co. I may further state about that time or a little later a sample wire hook with a safety-pin attachment like figure 1, with an additional curve to it, was sent to me from one Rice, of Minnesota, offering it for sale.

Q. 30. From your practical knowledge and experience would you consider the form of device shown in figure 2 of the Sherling patent as a practical or useful attachment for sweat pads?

363 Question objected to as incompetent, for that an infringer can't attack the utility of the patent infringed.

A. I consider it impracticable because it cannot be attached into a pad to catch hold of enough material to stand the requirement.

Q. 31. Is your wire hook capable of being attached to the pad practically without the use of an additional or supplemental device—the slotted piece of leather riveted to the pad?

A. It cannot be, and was never intended to be, attached in any other way.

Q. 32. Do you consider the projecting-end portions of the wire forming your pad hook as safety-pins in the sense in which that term is used in the Sherling patent, or in any other proper sense?

Objected to as irrelevant.

A. I do not, because mine are not intended for pins; neither are they. All I intended it for was a projection over which I can lap a piece of leather or other material by which to fasten the hook to the pad.

Q. 33. Could these pad hooks be used as well if the projecting ends of the wire were extended beyond the leather and had heads, knobs, or rims formed thereon?

Objected to as irrelevant.

A. They could.

Q. 34. Have you ever used safety-pins in connection with saddlery? If so, what kind, when, and in what way?

A. We do not use them in that sense in our business, but we have kept them on sale for a considerable number of years under the name of blanket pins. They are used for pinning on blankets over horses in various ways, especially for turf stables. I could not tell exactly how long, but I should think it was at least five or six years since we first began selling them. There are a considerable number of different styles and patents. This is only one of them (producing a safety-pin), but it is of a kind we have had in our
364 store for five or six years, as stated before. I suppose it is not the same kind, as they are changing patterns all the time. The only change that I ever observed is where the safety attachment for the point of the pin is.

The safety-pin here produced by the witness is offered in evidence and marked Defendants' Exhibit Ortmayer No. 12.

Q. 35. Then, as I understand you, this safety-pin which you here produce is a fair illustration of the safety-pins which have been used for several years past in connection with horse blankets?

A. Yes, sir.

Q. 36. Please look at Defendants' Exhibit Jenkins No. 3, and state whether it could be readily applied and used as a fastening for horse-collar pads.

Objected to as incompetent.

A. It could if made larger, heavier wire, and the hook bent so as to fit the fore roll of a collar.

Q. 37. Could those changes be readily and naturally made by an ordinary mechanic familiar with wire-working?

Objection repeated.

A. It can.

Q. 38. Have you ever used pads detachably fastened in connection with saddlery or harness goods other than sweat pads for horse collars?

A. Yes, sir; gig sweats under a gig saddle, and what we call pads under a gig saddle, and collar pads on top of the horse's neck, and small pads which are used if a horse has a galled neck—to be fastened above or below the sore spot where the horse collar touches the sore, and sometimes both above and below.

Q. 39. How are these different pads fastened in their respective places?

A. The same mode of fastening of all kinds can be used on or about a horse collar as we put on to the large collar-pad.

365 Pads under gig saddles are attached by loops, straps and buckles, and by devices to hook over the check hook, and sometimes they are screwed on, fastened on by a turret, the turret screwing into the pad.

Q. 40. Have you ever manufactured and sold gig saddles with pads fastened in the way shown in your reissued letters patent of March 7, 1882, No. 10055; and, if so, for how long?

A. Since 1875 or 1876 we have manufactured them, and manufacture them yet.

Q. 41. Is your pad hook here in controversy a spring or intended to operate in any way as a spring?

Objected to as incompetent.

A. It was not.

Q. 42. What are the practical differences, if any, between the operation of your wire hook and McClain's steel spring?

A. Both go over the fore roll of a collar. My hook is made stiff enough to keep its shape and open far enough to receive or go over the roll of a collar without opening further. The McClain device closes up to a very small space and has to be sprung out or opened to go over the fore roll of a collar, and must necessarily be a spring to close up again.

Q. 43. Why do you use a leather loop at the top of your sweat pads?

A. I prefer to put them on in connection with my hook device to more firmly hold the pad on top, and in case where my hook should be a little large for the fore roll of a collar, and apt to unhook in handling, that there is an additional means of keeping the pads on the collar. Collars are made of different sizes, and have fore rolls of different sizes.

Q. 44. I omitted to ask you when speaking of the Scherling patent whether or not any of the forms of safety-pins or devices called safety-pins therein shown are now manufactured or in the market.

Objected to as immaterial and irrelevant.

366 A. I don't know of any; not to my knowledge.

Q. 45. I believe you have already stated that the form of attachment shown in McClain's first patent was never manufactured or put into the market, so far as your knowledge goes.

A. I believe I did answer that way. I have never known of them or seen them in the market.

Q. 46. How about the form of attachment shown in the McClain

second patent? Has it ever been manufactured or put into use, and is it now manufactured and in use?

A. They have been manufactured and used, and I have bought them and sold them myself. I bought part of them from parties here in Chicago and part of them from McClain & Anderson. The same clasp is now in use, but the mode of attachment to the pad has been changed since last spring. This pad here before me, which we bought from McClain & Anderson, shows the way in which the clasp is now attached, as McClain & Anderson are manufacturing it, which, as I understand, is also shown, at least in a general way, in the McClain patent of March 10, 1885, No. 313,606.

Q. 47. Then, to sum up, none of the forms of fastening devices shown in the three patents sued on is now in the market, so far as you know, the nearest approach thereto being the present form of spring manufactured by McClain & Anderson, as shown in the pad referred to in your last answer. Is this correct?

Objected to as leading; and further because it misrepresents the testimony of the witness in this, that he has stated that McClain & Anderson's present hook is the hook shown in McClain patent No. 2 somewhat differently attached to the pad.

A. It is the way I understand it.

The sweat pad referred to in the last two answers is offered in evidence and marked "Defendants' Exhibit McClain's Present Attachment."

367 Cross-examination by Mr. MOORE:

X Q. 48. Did you ever act as an agent for McClain & Anderson for the sale of their pad; if so, when did you commence to act as such agent and how long did you continue to so act? State as nearly as you can.

A. All I know about it is that they mentioned our names in their advertisements as their agents in the last year or two.

X Q. 49. Do they mention your names now as their agents in their advertising circulars?

A. I think not—at least, the last circular I saw I couldn't find our name on it.

X Q. 50. State a little more accurately, if you can, when you commenced to sell their pads.

A. I couldn't tell it within a year. It is certainly not more than three years, and may not be more than two. Whenever we received orders for the "Success" pad we filled the orders from McClain & Anderson's manufacture. For a time we bought them from our neighbors in business—that is, we had an understanding with them to allow us a percentage. When we sent the first order to them direct I couldn't state. The "Success" is the McClain & Anderson pad.

X Q. 51. Then you dealt in the McClain & Anderson pads for some considerable time before you purchased any direct from McClain & Anderson?

A. I think we did.

X Q. 52. Don't you know you did?

A. I am not quite positive. We are buying the McClain pad now from our neighbors from time to time; when we are out we accommodate each other by an exchange.

X Q. 53. The first detachable metallic hook for attaching a sweat pad to a collar that you ever saw was such as shown in the McClain patent No. 2 and upon the McClain & Anderson pads. Is that right?

A. Yes; that is right.

368 X Q. 54. Had you dealt in the McClain & Anderson pads for some considerable time before you applied for the patent referred to in your answer, and about how long?

A. We have bought and sold McClain & Anderson's pads, as I mentioned before, perhaps a year or more before I applied for a patent for our own. I am not certain. We never made any effort to sell the McClain & Anderson pad. When we got orders we sold them.

X Q. 55. The first McClain & Anderson pads that you ever saw, as I understand you, had the hooks shown in McClain patent No. 2 on them? Is that right?

A. I think so.

X Q. 56. Can you give me, without referring to your books, an approximate statement of about the number of collar sweat pads that you sold per annum—say from 1870 to 1880?

A. I could not.

X Q. 57. Can't you give us an approximate estimate?

A. I could not.

X Q. 58. Don't know whether you sold a hundred or a million in a year?

A. I know we didn't sell a great many; we didn't make it much of a business.

X Q. 59. Would your sales amount to one hundred pads a year during those years?

A. O, we never make them by single pads; we make them by the dozen; we made them when we got orders for them and kept a few on hand. I am not thinking of the selling of the goods much and have not got a good impression, but I will say I think we sold as many as others in the business sold, in proportion.

X Q. 60. I don't want to know what the relation was between your sales and the sales of any other house whatever. I want your best estimate of the number you sold per annum about that period, and I will now ask you, Were your sales of sweat pads then

369 nearer twenty dozen or fifty dozen per annum?

A. I think we sold near three hundred dozen or perhaps four hundred dozen; sometimes five hundred dozen. We may have run up to five or six hundred dozen.

X Q. 61. This is your estimate, as I understand you, for a period of time prior to the introduction of the McClain adjustable fastening. Is that right?

A. 1880, of course, is before the McClain pad came out.

X Q. 62. About how many do you think your house sold per

annum from the time you commenced to deal in those having the McClain fastener?

A. I couldn't tell you no more than—I don't know whether it is a hundred dozen or what it is; I couldn't tell really. The boys, when they have an order for anything of that kind, and they don't find it in the house, go out and buy them where they can find them.

X Q. 63. Do you mean to be understood as saying that you sold more sweat pads prior to the introduction of the McClain fastening per annum than you have sold since that time?

A. No, sir; I don't mean to say that. Our sweat-pad business has steadily increased for years. I only meant to say, referring to the McClain & Anderson pad, that we didn't sell a great many of their make; we sold our own make.

X Q. 64. You did state, in substance, that your sales of sweat pads from 1870 to 1880 might be anywhere from three hundred dozen to six hundred dozen, and in a subsequent answer that your sales—subsequent to the introduction of the McClain fastening—might amount to about one hundred dozen. Did you mean that you sold a hundred dozen of the McClain pad or thereabouts?

A. That is what I meant. I meant that in addition to our own manufacture.

370 X Q. 65. About what would your sales for the years 1885 and 1886 thus far of the McClain pad amount to per annum?

A. We have sold very few this year. Since they sued us we haven't bought any—that is, we have not bought any direct from McClain & Anderson.

X Q. 66. Did your sales of the McClain & Anderson pad for the year 1885 amount to one hundred dozen, or would it be more or less, according to your best judgment?

A. My impression is that it is rather less than more than a hundred dozen.

X Q. 67. And for 1886 thus far your sales of the McClain pad would be less still than in 1885, would they not?

A. I don't think they were really less, because we never sold many. I think we sent them several orders. I didn't myself.

—. With reference to the date of your application for your patent referred to, about when did you commence to make sweat pads with your hooks on for sale?

A. I have forgotten when the application was filed—July 30, 1885, I see. Well, we didn't do much at it that year—that is, in 1885. I mean to say by the time we could have commenced the season for pads was over.

X Q. 69. From whom did you first hear of the existence of the Scherling patent, and about when was it?

A. I did not hear from the Scherling patent until Mr. McClain sent me that patent paper. I heard through my salesman, traveling through the States of Wisconsin and Minnesota for his territory, that L. D. Randall & Co., in Dubuque, are having a metallic clasp device for a sweat pad, with a safety-pin attachment. That is the first I heard. That was in the spring of 1885, about.

X Q 70. When did you first see a copy of the Scherling patent, about?

A. Well, I say November, last year.

371 X Q. 71. Did you have any consultations with your solicitors who solicited your patent referred to in your answer about its being rejected on the Scherling patent? What is your recollection about that?

A. I don't recollect on what account the patent was first rejected. I recollect that Mr. F. F. Warner, my solicitor, told me that it was objected to, and he had written out an argument, which he, however, didn't read to me, remarking that he would make it all right. That is my recollection.

X Q. 72. But you knew at that time, didn't you, the reason of the rejection of your application?

A. I was not told, to my recollection. I don't recollect anything that he stated to me. I did not pay any attention to it, because most applications are first rejected.

X Q. 73. Then you didn't ask him upon what reference or reason the Commissioner of Patents rejected your application?

A. I have no such recollection.

X Q. 74. After you got well under way in the manufacture of pads with your patent hook attached to them about what proportion of your sales were of the McClain pads and about what proportion of your pads were without fastenings or had straps or cords?

A. I don't know.

X Q. 75. Can you give us some intelligent estimate as to the proportion or ratio between those having hooks on and those not having hooks at the present time?

A. I couldn't tell you the proportion.

X Q. 76. Can't you give us any intelligent idea at all?

A. I have no means to figure on it in my mind. I can say, though, that we sell more with the hook attachment now than of any other.

X Q. 77. Well, don't you sell four times as many with the hook attachment as you do of all other kinds?

A. I don't think we do.

372 X Q. 78. Do you sell three times as many with the hook attachments as you do of all other kinds?

A. Well, it may be somewhere between one-half and two-thirds of all we sell with the hook attachment.

X Q. 79. Mr. Peacock stated during his examination that he had made about ten thousand of your hooks for you. Does that accord with your recollection of the fact?

By Mr. BANNING: The question is objected to as irrelevant and incompetent at this stage of the case, it being an improper inquiry into the affairs of the defendants' business before any accounting has been ordered, and the witness is instructed not to answer.

Counsel for complainant desires to say that the self-evident purpose of the inquiry, when taken in connection with prior questions, is as to the effect upon the market for these pads of the introduction

of the McClain detachable hook, and he puts it now to counsel for defendants, in view of the other fact evident from the testimony of this witness, that it is like drawing teeth to get this information from him or data on which to make such calculation; whether he, counsel, in view of this explanation, will insist in impeding the means of making the above inquiry.

By Mr. BANNING: I have no desire to prevent the fullest inquiry into all material facts in any way that seems proper, and I have put this witness, who is the principal man in the defendant company, on the stand mainly for the purpose of showing that the defendants have been and are acting in good faith and for the purpose of enabling or permitting the complainant's counsel to cross-examine him in order that both the complainant and the court might see that the defendants have nothing to cover up or conceal, and
373 if ever the case should reach a stage where the figures sought to be obtained by the question shall appear proper or material they will be forthcoming; but, as the proportions have been fully inquired about and given according to the witness' best judgment or recollection, I cannot see that the inquiry whether they have sold one thousand or ten thousand or any other particular number has any bearing on the present issues, and therefore, without any actual knowledge on the subject and without knowing whether the information called for would be in the defendants' favor or against them, I feel constrained to advise the witness that complainant has no right to inquire into the private affairs of their business at the present stage of the case.

Complainant's counsel desires to respond that the above appears to him quite specious, to put it mildly, defendants' counsel saying in one breath that defendants have nothing to hold back and in the next breath counsel interposing, in so far as he can, his *ipse dixit* as to what shall or shall not appear upon this record.

Complainant's counsel is quite mindful of his right in the premises and of his remedy, too, but has no objection, in order to save time, to waive both for the present, so that defendants' counsel may have an opportunity of showing just how much sincerity there is in his professions of entire candor in this matter. Counsel requests the officer to read the question to the witness, so that it may be seen how much he is infected with his counsel's candor.

A. I must decline to answer by advice of my counsel.

X Q. 80. This one-half or two-thirds ratio of your sales which you say have hooks on—is this substantially so much new trade, or do you make and sell less pads now than formerly which have no fastenings or have the old mode of fastening?

A. I don't understand the question.

374 X Q. 81. Do you sell as many pads now which have no fastenings as you did sell of that kind prior to the introduction of the McClain hooks?

A. I think we sell less of pads without the fastening than we did prior. I have no idea how much less, but I know we sell less. The

hook fastenings being something new, the people of course try them, and we talk more about them, too.

X Q. 82. Do you know why it is that people generally prefer the hook fastenings either to the pads without fastenings or to the strap or string modes of fastening?

A. I haven't heard an opinion expressed from any of my customers in that regard or from anybody who uses it.

X Q. 83. Then, as a matter of fact, you mean to be understood that you know of no advantage in the use of the hook fastening, as compared with the old modes of dispensing with the fastening, or using the strap or string fastening or sewing them in?

A. I know that there is a greatly increased demand for the pads with detachable fastenings; what particular advantage there is in it I do not understand. My own opinion from my own practice and observation is that there is no particular advantage in the metallic spring or hook fastening than in the strap and buckle fastening as we have made them prior to these fastenings.

X Q. 84. It was because of this greatly increased demand, was it not, that you invented the hook device shown in your patent and used by you?

A. Partially; yes.

X Q. 85. What suggested this invention to you?

Objected to, as the Ortmayer patent is not now on trial.

A. There was a pressure brought on me by my salesmen that they ought to have, besides the way we were making pads, some-
375 thing with a hook device, because there were several other parties besides McClain & Anderson having patents taken out for such devices and commenced putting them on the market. I declined for awhile meddling with it, but their complaints being coming in that the McClain spring clasp wasn't altogether satisfactory, and that set me a studying to make something wherein those objectionable features would be avoided; and, further, as a manufacturer of saddlery generally, and among these sweat pads I always disliked to buy things outside which I could make just as well myself. I have been studying on a device which would be both cheap and durable, and to my best ability practical. I had no assistance in any shape or form otherwise except my individual thought; that I struck the outline shown in the Scherling figure No. 2 was an unintentional incident; and when I got that patent and saw it I showed it to my solicitor, F. F. Warner, for his advice. My application having been previously filed, I wanted to know whether I had not better change the outline, which I just as well could have done, but he advised me that the principles of my device were entirely different to the Scherling figure No. 2, and that there was no such necessity of making the change. As I had already gone to the expense of getting my dies made, we continued to use it just that way.

Adjourned to November 2, 1886.

NOVEMBER 2, 1886.

Said parties met pursuant to adjournment.

Present as before.

X Q. 86. In your last answer you stated that your solicitor, Mr. Warner, advised you that the invention for which you were seeking a patent was different in principle from the Sherling patent. Now, isn't it a fact that you thought at that time that you invented that whole hook, as well as the mode of attaching it by the leather
376 hinge, and isn't it further the fact that you were trying to patent the hook regardless of the mode or mechanism by which it was attached to the pad?

A. I did not. I didn't think of any other mode of fastening than the one the hook was gotten up for; that is the way it was patented and the way we are using it, and we never used it in any other way. I will say further that Mr. Ephriam Banning, my present counsel, advised me at the time when this suit was brought against us that it was unnecessary to change the outline of the hook, unless I wished to do it for some other reason, because it was different in principle. Referring more particularly to the question, I will say that at the time I considered myself the inventor of the entire hook, as I had never seen that form of hook or known anything about it before, but I never intended to use it except when fastened in the way shown in the patent.

X Q. 87. But didn't you intend to patent it—that is, get a claim upon it in your patent—without reference to the leather hinge and without reference to any other mode of fastening?

A. I did not. What my solicitor done about it I don't know.

X Q. 88. Well, but didn't you think that that hook was a patentable invention, without reference to the leather hinge or any particular mode of securing it?

A. I had no thoughts on the subject to disconnect in my patent the hook from the fastening.

X Q. 89. Of course you examined the specification sent off to the Patent Office before you swore to it, didn't you?

A. Suppose I read it. Mr. Warner generally sent it to me in the office to examine.

X Q. 90. The following claim was in the application as sent on: "A horse-collar sweat pad provided with hooks made of
377 wire bent to clasp the roll of a collar, and also having latterly extending ends clasped to the pad, substantially as and for the purpose specified." I assume that when you swore, among others, to this claim as being your invention that you then believed this claim contained a patentable invention. Am I correct in that assumption?

A. I expect at the time I examined the claims it is what we wanted. As to the form of the claim, dividing the thing into different claims, I had no suggestion to make myself; that was entirely left to the solicitor, and whether the Patent Office has allowed our claims the way they were first set up I don't now recollect; I know there was an objection to it at first. Yes; you are correct.

X Q. 91. About what is the cost of putting on one of your patented hooks as compared with the cost of a strap and buckle?

A. My hook is somewhat cheaper than the strap and buckle.

X Q. 92. Can't you state more definitely about what each costs when completed?

A. I think the difference is about ten to fifteen cents on a dozen sweat collars.

X Q. 93. Then what would hooks for a dozen of the pads cost, including the putting them on the pads?

A. About thirty cents.

X Q. 94. What would it cost to stitch a dozen of the pads to the collars, for labor, etc.?

A. That is something I don't know. I never stitched one in twenty-five years.

X Q. 95. But you are a harness-maker and know about the amount of labor required to stitch a pad to a collar, and, having the knowledge, I ask your opinion upon that matter.

A. If you get it done by a boy, which is very often the case at harness shops, it may not cost more than six cents a dozen. If it is done by a man, who earns 15 cents an hour, which is what ordinary harness-makers generally get now, it would take about an hour to stitch a dozen.

378 X Q. 96. Your attention has been called to a safety-pin known as Defendants' Exhibit Jenkins No. 3, and you have stated, as I understand you, that it would require no invention, but only the skill of the ordinary mechanic to adapt that as a device—so change it that it would form a good expedient for securing a pad to a collar. If I am right in this statement of your opinion, I will also ask you if that is now your opinion with reference to the device you have patented.

A. I think I have said that if this Jenkins No. 3 would be larger, of heavier wire, and the hook shaped in the form to go over the collar, it would answer the purpose. If the question has been put to me in that shape I very likely have answered it in the affirmative. By this I mean that it does not take more than ordinary skill. I thought mine was an invention, because it was an original thought of mine. It don't require much skill to make it after the thought has been conceived; I still think the same way.

X Q. 97. Well, if before you had invented yours you had happened to see the pin, Jenkins No. 3, and you had conceived the thought that you could so change it as to make it a practicable fastening for pad and collar, and you had, in addition, gone on and made such fastening, and it was a practicable fastening—don't you think, in that case, you would have made an invention in addition to the mechanical skill used in making the actual fastening?

A. I don't think I would ever try to get a patent on it. If I had seen the pin as it is and the thought had struck me that it can be utilized as a collar-pad fastener, I would perhaps find out whether there is a patent on it or not, and if there was no patent and I would want to use it I would use it without applying for a patent.

X Q. 98. Suppose, before you had made your invention,
379 you had seen Jenkins No. 3, and from an examination of it you had conceived the idea of your present hook just as patented, and had made one and found it exactly right, would you in that case have made an invention according to your present opinion?

A. No; I don't think that would be an invention; not if I had taken it from something else.

X Q. 99. And the mere fact that you had seen the McClain hooks, such as shown in the McClain patent No. 2, upon the McClain pads, prior to your making your invention, did not, as I understand you, interfere with your belief that your hook, when you had made it, was a patentable invention? But if you had seen before that time and carefully examined a pin like Jenkins No. 3, then you would not have considered your hook, if made subsequently to such examination, a patentable invention. Am I right in these assumptions?

Question objected to, because the witness has not patented a hook merely, but a combination in which a hook hinged in a particular way forms a feature, so that it is incorrect to say that the novelty or patentability of his invention consists in the form of his hook merely.

Complainant's counsel desires to say that the above so-called objection was spoken aloud in the presence of the witness, and the court is requested, when reading the answer following, to take into consideration the said objection.

A. I have seen the McClain before I went to work on mine, and I tried my best to make something which would not interfere with McClain No. 2. For a proof that I believed it patentable I applied for a patent and got one. Yes, I would still think that mine is original, because I probably would not think, if I saw this Jenkins No. 3, that there was anything in it like mine.

380 Redirect examination by Mr. BANNING:

R. D. Q. 99. Then, referring to the last two answers in your cross-examination, do you mean to be understood or have you intended to say that your own invention, as constructed and applied, is merely a mechanical change from the Exhibit Jenkins No. 3, or would you have still considered that your own invention was patentable if you had previously known of the existence and use of safety-pins like such exhibit?

A. I certainly would have considered mine patentable if I had seen this (Jenkins No. 3), for I do not see mine in this.

R. D. Q. 100. Then, if your answers contain anything that may possibly be contrary to this, have you intended them in that way or, in such case, have they been made through misunderstanding?

Objected to as leading.

A. My answer before this is what I meant all the way through. I don't recollect that I have made any statement different from this.

If I have stated anything conflicting with this it is a misunderstanding.

R. D. Q. 101. Complainant's counsel has ingeniously endeavored to worm into the record a statement to the effect that at one time you were agent for McClain & Anderson or McClain in the handling of their pads with metallic spring attachments. Please state whether you ever acted as agent and give fully all the facts in your possession bearing on the relationship at any time existing between you and the parties named in reference to the matters suggested.

Complainant's counsel desires to protest against the insinuations involved. As a matter of fact complainant's counsel knew nothing of the matter of the witness' house acting as the agent of
381 McClain & Anderson until the witness stated it publicly in this room, in the hearing of all who choose to pay attention, and at that time added that McClain & Anderson had removed the name of defendants' house from the list of their agents in the last circular or advertisement issued by McClain & Anderson or the last one witness had seen.

By Mr. BANNING: I desire to disclaim any intention of making "insinuations" of anything improper on the part of complainant's counsel as to the matter suggested in my question, for, instead of its being improper, I really considered it a clever thing to do from complainant's standpoint.

A. If Mr. Moore understood me to say that we were acting as agents for McClain & Anderson he must have misunderstood my meaning. We never applied for an agency, never requested him to use our name as agent, but we sent them orders and bought their "Success" pads and paid for them in the regular way. I stated that McClain & Anderson named us in their advertisements as agents for them and that I had noticed from their last circular, mentioning all the names of those houses they call agents, I did not find our name in it. If it was in it I overlooked it. There is a difference, in my opinion, between acting for a party as agent and being merely called so by them. We have never been their agents in any sense of the word.

R. D. Q. 102. Then, as I understand you, all of their sweat pads which you have handled have been bought and paid for in the regular way?

A. That's what I mean and said.

R. D. Q. 103. And if they have advertised your house as one of their agents it has been voluntary on their part and the favor and benefit have been to them rather than to you?

A. That must have been.

382 R. D. Q. 104. You have spoken of an increase in your sweat-pad business, saying, as I recollect, that it has steadily increased ever since you began their manufacture. Do you mean by this to convey the impression that the use of sweat pads has increased specially, or, if not, what do you mean, and to what do you

attribute the increase in your business as above mentioned? Answer fully.

A. I mean that the increase of the use of sweat collars is, in my opinion, not more than the natural increase according to the number of horses and the population of the country. I may further state that in my opinion there is no more sweat pads used to-day in proportion to the number of horses than there always have been. There may be sections of the country, though, where there was an increase; I cannot say. My opinion is based upon figures and observation. Formerly harness-makers have made their own pads; twenty years ago I have known of no wholesale house making any sweat pads; about that time I started to make sweat pads to sell to harness-makers. I was the first wholesale house, to the best of my knowledge, that did so. Since that time the harness-makers have slowly dropped off making their own pads. I have here a harness-makers' directory of 1886, published in New York, containing the names of harness-makers in the United States—14,152—Canada, 1,110—making a total of about 15,000. Conceding if those harness-makers would to-day make their own sweat pads and each would sell on average only one per week, or say four dozen per year, that would make 60,000 dozen sweat collars to be used in this country; and my opinion is that this total pretty near covers all the sweat pads per year now used.

McClain & Anderson have succeeded in supplying a large part of that demand for sweat collars—I don't know whether it is
383 half or one-third—but still the balance is shared by a large number of manufacturers, large and small. I judge this from statements made in their advertisements of the numbers they sell and from rumors. This great success of McClain & Anderson, securing such a large share of the sweat-pad trade, is, in my opinion, largely attributable to a skillful manner of advertising and an admirable system of placing their pads in most all the saddlery jobbing houses in the United States and Canada. By this system the E. L. McClain Company secured the advantage at once, indirectly, of the service of hundreds of traveling salesmen to introduce their pads. I believe that under this system as above stated, with other fastening devices on sweat pads stamped "patented," McClain & Anderson could have achieved nearly the same result.

R. D. Q. 105. Then, to state the matter briefly, the increase has really been in the wholesale trade, and has been occasioned largely or mainly by retailers discontinuing the manufacture of their own pads?

A. Yes; that's my opinion.

R. D. Q. 106. And has this increase in the wholesale trade been in any large measure due to the particular form of attaching devices used?

A. I think not.

R. D. Q. 107. In your answer to cross-question 99, and perhaps other answers, you state that in making your attachment you tried not to interfere with McClain's metallic spring, particularly his single-roll spring. Do you mean by this that you tried to make

another and substantially different fastening which, in any reasonable view, would not be within either the letter or spirit of his claims?

Objected to as leading.

A. I meant to say that I tried to make something on an entirely different principle, and I think I succeeded.

384 Recross-examination by Mr. MOORE:

R. D. X Q. 108. You stated, in answer to question 104, 60,000 dozen pads as the number made at present per annum in the United States and Canada. Is this the result of your best judgment, from your experience in the business?

A. That is nothing but a mere guess based upon the number of harness-makers I find there is in the country, and judging the least number of pads they would average during the year—I mean of sweat collars made and sold.

R. D. Q. 109. In the same answer you further stated that with any other or almost any other detachable fastening for securing the collar to the pad McClain & Anderson could have secured as large a success as they have done by the methods of business that they have pursued. Was it this reflection that induced you to get up a fastening device that is a substantial imitation of theirs?

A. No, sir; I had no thought at that time that I got up mine that I ever would come in a situation to make such figures. I made the calculation that appears in that answer to-day for the first time.

ANDREW ORTMAYER.

The witness, ANDREW ORTMAYER, returned the day following the closing of his deposition and made the following statement or explanation, to wit:

I desire to amend my statement of yesterday in regard to whether we were agents for McClain & Anderson or not. By searching in our office I found this morning an agreement between A. Ortmayer & Son and McClain & Anderson, dated the 5th day of December, 1885, at Cincinnati, which I here produce to be offered in evidence if desired.

385 There is nothing to be changed from what I said before, except as shown in this agreement, and I may say further that we have always adhered to the terms of this agreement. As I have said before, I simply bought and sold the goods in the regular way. They appointed us agents as soon as we sent them an order, in the way shown in this paper.

ANDREW ORTMAYER.

Counsel for defendants offers in evidence said paper produced by the witness, and the same is marked "Defendants' Exhibit McClain Agreement," and is as follows:

Agreement.

Articles of agreement made and entered into this fifth day of Dec., 1885, by and between McClain & Anderson, of Cincinnati, Ohio, sole manufacturers of the "Success" sweat collars, parties of the first part, and A. Ortmayer & Son, of Chicago, Ill., wholesale or jobbing dealers in saddlery, parties of the second part, witnesseth:

That we, said A. Ortmayer & Son, parties of the second part, in consideration of having with us an agency established for the sale of the "Success" sweat collar, and such other articles as may now or hereafter by mutual consent be included, do hereby promise and agree to faithfully and honorably, in letter and in spirit, in full and in part, recognize this agreement to the best of our interpretation thereof, as follows:

First. That we will recognize the schedule of prices attached hereto.

Second. That we will not in any manner by any pretext or from any cause whatsoever deviate from the prices named in the attached schedule.

Third. That we will not allow any discount for cash or otherwise other than the discounts named in the attached schedule.

886 Fourth. That we will not allow any rebates, pay any transportation, make any present of money, of merchandise, or anything whatsoever in the nature of any premium or bonus that might in any manner be misconstrued into an attempt to avoid the combination price, as fully set forth in the attached schedule.

Fifth. That we will not vend or retail said goods at a price that will exclude fair and honorable competition from dealers commonly known and recognized as "retail dealers" or venders.

Sixth. That we will, as long as we handle said goods, recognize any combination or schedule of prices that may from time to time be established.

And in consideration of the foregoing we, the said McClain & Anderson, parties of the first part, agree and promise as follows:

First. To refuse to sell the goods included in this agreement to any firm or corporation not engaged in the wholesale or jobbing business.

Second. To refuse to sell the goods included in this agreement to any firm or corporation who does sign this agreement.

Third. To refuse to sell the goods included in this agreement to any agent who in any manner or by any pretext or scheme whatsoever seeks to avoid the letter and spirit of this agreement.

Fourth. To investigate immediately on receipt of any report from any agent against any agent to the effect that the agent complained of has in any manner disregarded this agreement; but it is to be expressly understood that all facts and proofs in such cases must be fully presented in writing, and that the same will be held by us in strict confidence, so far as may be found practicable, in thoroughly investigating the case. We promise, however, not to,

887 under any consideration, divulge the name of any informant without first having a written permission to do so.

We hereby grant permission to all agents to exchange with or sell to each other the goods included in this agreement on the usual and customary terms or "accommodation" advances.

A complete list of all recognized agents can be had at any time by applying for the same.

It is provided that this agreement may be annulled at the option of either party upon the serving of a written notice to that effect.

The articles included in this agreement are the "Success" sweat collars numbers 1, 2, 3–10. Schedule of prices referred to in the foregoing agreement.

The following prices are the prices at which you agree to sell the goods enumerated in the above agreement to the retail trade when you sign the same.

(Here follows a schedule of prices for all the States and Territories in the United States and for Canada, which is omitted by consent of counsel.)

Cash Discounts.

The following stipulation to the above agreement is one that we recognize as of great importance, and is the one clause in the whole that we deal with reluctantly. Some provision relating to cash discounts must be made, however, for experience has taught us that otherwise there is too often a proneness to grant superfluous discount "for cash," which when brought to our notice places us in an exceedingly embarrassing position. We have concluded, therefore, in justice to all, to establish the following rule governing this particular feature, viz.: The discounts to be allowed for
388 cash in all cases can be, but are never to exceed, your regularly established cash discounts on all you sell, with the express provision, however, that in no case must the maximum cash discount exceed five per cent.

For the faithful performance of this agreement in every respect we hereby solemnly pledge our good faith and honor, as witness our hand and seal this — day of ——, 188–.

Dated at Chicago, Ill.

McCLAIN & ANDERSON,

[SEAL.] "By MACK."

BENJAMIN G. BLOWNEY, a witness produced, sworn, and examined on the part of the defendants, deposed and testified as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Benjamin G. Blowney; age, fifty-two; harness-maker; Waukegan, Ill.

Q. 2. How long have you been engaged in the harness business?

A. In the business thirty-two years in February.

Q. 3. Have you had any experience with sweat pads for horse collars; if so how much and in what way?

A. I have manufactured for my own sales and also purchased from manufacturers. I have known of them since I went in the

business, so far as manufacturing for myself is concerned. I have bought the manufactured ones for two or three years.

Q. 4. State how they have been fastened to the collars since you have known of their existence and use.

A. Sewed in the collar, tied in by strings, and with buckle and strap and by hooks and springs. That is all that has come under my observation.

Q. 5. How long have you known of their being secured by tie-strings or by straps and buckle?

A. I don't think it ever became general; it was only the convenience of the mechanic who applied them for his own convenience or the convenience of the customer. I think I have known of their being fastened this way ten or twelve years.

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Q. 6. When fastened by strings or straps and buckles how are the fastening devices applied and used?

A. The straps were generally sewed on and the strings passed through the pad on the edges. They were tied around the collar and the hames passed over them.

Q. 7. Were they so tied or buckled as to be capable of being readily loosened and taken off?

Objected to as being leading.

A. Yes. They were not required very often to be taken off. The sweat pad was opened at the top—that is, before these patent manufactures.

Q. 8. But were they or were they not so fastened as to be readily detachable?

Objected to as leading.

A. Yes.

Q. 9. Of course it was necessary to loosen the hames in order to take off the pad fastened in these ways. Is this also necessary when it is desired to take off a pad fastened by McClain's metallic springs or Ortmayer's wire hooks? But, first, are you familiar with these springs and hooks?

A. I am familiar with the springs and hooks referred to. I consider it necessary to remove the hames before being able to detach the pad.

Q. 9½. Have you handled and sold both these springs and hooks in your trade?

A. I have.

Q. 10. In buying them has it been presented to you as a special point in their favor that they enable the pad to be detached without loosening the hames, and in selling them have you so held out or represented to purchasers?

A. No, as to the first question. As to the second question, I never so represented to a customer or thought of so representing.

Q. 11. How long have you been handling and selling both or either of these springs and hooks?

390

A. Perhaps a year or year and a half.

Q. 12. In a practical view do you consider them the same in construction or operation?

A. Not exactly so.

Q. 13. In what respects do you consider that they differ practically?

A. The McClain is a spring, and is less or more elastic; Ortmayer's is a hook on an adjusting leather hinge.

Q. 14. Does the elasticity of the McClain spring enable it to be used on collars having fore rolls of different sizes?

A. I think it does.

Q. 15. How about the Ortmayer hook in this respect?

A. I think equally so.

Q. 16. Do you mean by your last answer that Ortmayer's hooks can be used on collars having fore rolls of different sizes unless the hooks themselves are made of different sizes? To illustrate, suppose the fore roll is an inch and a half thick at the place where the hook passes over it, would the hook adapted to such a collar be equally applicable to a smaller collar, say one having a fore roll only an inch or an inch and a quarter thick at the place suggested?

A. I think it would require the different-sized hooks for the different-sized rims for collars to apply it with facility and ease.

Q. 17. Taking into consideration their elasticity, is it necessary that the McClain springs be made of different sizes to thus adapt them to collars having fore rolls of different sizes?

A. I think it would.

Q. 18. Are these tie-strings and strap and buckle pads which you have referred to still in the market; if so, how extensively?

A. The tie-strings, I don't know of any in use at present, and the straps and buckles are less or more in use.

Q. 19. Do you still sell them in your trade?

A. Yes.

391 Q. 20. About what proportion of your present trade in sweat pads is in those having the strap and buckle fastenings, and what in each of the other kinds?

A. Well, the percentage is far greater in the hooks or springs than what they are in the straps.

Q. 21. As I understand it, the trade in sweat pads has increased materially during the last few years. Is this correct?

A. Well, the sale has increased, as far as the wholesale manufacture is concerned, to the retailers. Retailers have ceased the manufacture of them and thrown the purchase of them into the wholesale manufactory.

Q. 22. Then do you attribute the increase in the trade of the wholesale manufacture mainly to the fact that the retailers have ceased to manufacture their own pads?

A. I do.

Q. 23. Do you consider the ends of the wire forming the Ortmayer hook as pins or as devices in any way capable of being inserted directly into the pad covering so as to form a practical fastening for the pad?

Objected to as irrelevant and immaterial.

A. I don't think it could be inserted in the pad and form a practical fastening, the cloth not being sufficiently strong to hold it in its place or make it serviceable.

Q. 24. Do you think, from your knowledge of the art relating to horse-collar pads and fastenings therefor, that the drapery pin which I now hand you, marked "Defendants' Exhibit Jenkins No. 3," could be readily and easily applied and used as a fastening for sweat pads?

Objected to as leading and incompetent.

A. Well, it might be used. Oh, yes; it could be used. I can't say whether readily and easily or not. I can't say what the practical result would be; I never saw it used.

Cross-examination by Mr. MOORE:

392 X Q. 25. Prior to the introduction of the patented hooks the most general way of attaching the pads to the collar was by stitching them together, was it not?

A. Yes.

X Q. 26. This was a cheaper mode of attaching these devices together than by buckle and strap or tie-string, wasn't it?

A. Yes; the most convenient. Where parties could wait to have them sewed in we always sewed them in; when they wanted to take them home on their farms and put them on themselves we generally put them on with a string.

X Q. 27. It is more economical, is it not, and more convenient, at the same time, to attach the pad to the collar by these patented hooks than any of the old modes of attaching that you have mentioned?

A. Yes; I think so.

X Q. 28. The substantial fact is, is it not, that since the introduction of these patented hooks there is no particular demand for the old modes of fastening and everybody wants the detachable hooks?

A. Well, the old mode of fastening hasn't entirely been done away with—that is, sewing them into the collar—for we even find the hooks sometimes impracticable and sew them into the collar and take the hook off altogether.

X Q. 29. Yes; I understand you sew them in occasionally, but what I want to know is if the new method of fastening hasn't substantially taken the place of all the old modes of fastening?

A. Yes; I think it has.

X Q. 30. If you have an opinion as to the relative cost of the hook method—either kind—of fastening as compared with, first, the strap and buckles; second, the tie string, and, third, the stitching of them together, I wish you would state in each of these comparisons which is the cheaper and which more costly.

393 A. Well, I think the application of the hook has a tendency to cheapen the mode of fastening.

X Q. 31. What has been your observation, from contact with your customers, as to which is the most satisfactory in use of these different modes of fastening?

A. Well, customers are not so much given to the very particular modes of fastening as long as they answer the purpose and the goods are kept on hand for their convenience.

X Q. 32. Which hook pads do you deal in—those manufactured by A. Ortmayer & Son or those manufactured by E. L. McClain Company, formerly McClain & Anderson?

A. I deal in both of them.

X Q. 33. Are they equally satisfactory to your customers, or which is preferred?

A. Well, I should think it was about equal.

X Q. 34. In reference to price, which costs more than the other, if either?

A. I don't recollect; there can't be much difference.

X Q. 35. Do you sell them at the same price; or, if you sell one higher than the other, which is it?

A. I sell both for the same price.

X Q. 36. Your attention is called to answers 21 and 22, which will be read to you by the notary, and you are asked if the real reason why the harness-makers have ceased or nearly so to manufacture their own pads is not to be found in the introduction of these new patent fastenings and which the harness-makers cannot make or apply?

A. There are several reasons to my mind why the harness-makers have ceased to manufacture. The expense of machinery, such as sewing-machines, and also the inconvenience of procuring material, such as hair and cloth, and also the disturbed state of labor throwing it as a matter of convenience into the hands of the wholesale manufacturer.

394 X Q. 37. Well, do you mean that the introduction of these patent fastenings has not influenced this change of the trade that you have described?

A. Oh, I think it has its influence.

X Q. 38. The inconveniences resulting to the harness-makers manufacturing pads from purchase of material and machinery for the making of the pads and the unsettled state of labor have existed for the past ten or fifteen years substantially as they do to-day, have they not?

A. No; things are changing.

X Q. 39. But this change in the direction of the trade has all taken place since the introduction of these patent fastenings, has it not?

A. Yes; I should say so.

Redirect examination by Mr. BANNING:

R. D. Q. 40. Have you ever known of McClain or McClain & Anderson manufacturing or selling a fastening for sweat pads comprising a two-roll spring adapted to grasp both rolls of the collar, as shown in McClain's first patent, No. 259,700, say as particularly illustrated in figure 3 of its drawings?

A. I never saw one or heard of one.

R. D. Q. 41. Would you consider that a practical form of fastening or not?

A. Well, I wouldn't consider it a practicable one.

R. D. Q. 42. Have you ever known of McClain or McClain & Anderson manufacturing or selling a fastening for sweat pads comprising a safety-pin, as shown in the drawings of the Scherling patent sued on, No. 298,626?

A. I never saw one and never heard of one.

R. D. Q. 43. The present form of fastening which McClain is manufacturing now is the one forming the Defendants' Exhibit McClain's Present Spring, as I understand. Is this also your understanding or not?

395 A. I understood that it was the one attached to this other pad here before me and which is represented in McClain's patent of November 7, 1882—No. 267,011.

R. D. Q. 44. Which one of McClain's are you now handling?

A. This one attached to Defendants' Exhibit McClain's Present Spring. I wouldn't be positive, but I think this is the only form I have sold, and I have been selling it since last spring, I think.

R. D. Q. 45. Then, so far as you know, this is the only form of fastening that McClain is now manufacturing or selling?

A. Yes, sir.

BENJAMIN G. BLOWNEY.

JOSEPH STEPHEN, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, occupation, and place of residence.

A. Joseph Stephen; forty-nine years old; occupation, harness-maker; residence, Joliet, Ill.

Q. 2. In what business are you engaged—wholesale or retail?

A. Retail.

Q. 3. Do you handle sweat pads for horse collars in your business?

A. Yes, sir.

Q. 4. What kinds as to their fastening devices?

A. I use mostly my own make, the sewing-in kind, and this kind right here. We call it the "Success," referring to Defendants' Exhibit McClain's Present Spring.

Q. 5. By the "sewing-in kind" you mean that you sew the sweat pad fast to the collar?

A. Yes, sir.

Q. 6. What proportion of your sales are of this kind and
396 what of the McClain fastenings like Defendants' Exhibit McClain's Present Spring?

A. Two-thirds of the sewing-in kind and about a third—hardly a third—of the McClain present spring kind.

Q. 7. Is this in accordance with the requirements of your trade?

A. Yes, sir.

Q. 8. Do you understand the form of spring shown in the drawings of McClain's first patent—say figure 3?

A. I can't say that I fully understand this drawing here, but I understand the form of spring it shows.

Q. 9. Have you ever known of McClain or McClain & Anderson or anybody else manufacturing or selling this kind of a spring as a fastening for sweat pads?

A. I have not.

Q. 10. Do you understand the form of spring shown in the drawings of McClain's second patent—say in figure 2?

A. I do.

Q. 11. Have you ever known of McClain or McClain & Anderson manufacturing or selling this form of a spring secured to the pad by rivets since you have been handling their goods, as above mentioned?

A. No, sir.

Q. 12. Do you understand the forms of fastening devices shown in the Scherling patent, No. 298,626?

A. I do.

Q. 13. Have you ever known of McClain or McClain & Anderson manufacturing or selling any of these forms of devices as fastenings for sweat pads or in any way in connection with sweat pads?

A. I have not.

Cross-examination by Mr. MOORE:

X Q. 14. When did you first commence to handle McClain's or McClain & Anderson's sweat pads?

A. About a year ago, I think.

X Q. 15. How long have you been familiar with the pads
397 manufactured by McClain and McClain & Anderson and with the detachable hooks attached to them?

A. About a year.

X Q. 16. Am I to understand that you don't know anything about the form of hook used by them prior to about a year ago?

A. I have known of them, though I never used them.

X Q. 17. How long have you known of their pads and been familiar with their style of detachable hooks used by them?

A. I have only been familiar with them about a year.

X Q. 18. Do you or do you not know the character of detachable hooks used by them prior to a year ago?

A. Not really.

X Q. 19. Do you mean to be understood as saying that one year ago they used the hook shown in Defendants' Exhibit McClain's Present Spring?

A. I couldn't say.

X Q. 20. Well, but, as I have understood you, you have testified that you have been familiar with their manufacture for a year, and that the only hook that you have ever known them to use was the hinged hook referred to in the last question, and the question I desire to ask you is, did you know of their using that hook as much as a year ago?

A. I wouldn't be positive as to the time. I have only been fa-

miliar with them about a year—from the time I began to handle them.

X Q. 21. Did you ever see sweat pads for collars having a detachable hook metallic fastening for this purpose upon them except those made by McClain & Anderson? If you did, state who manufactured such other pads and hooks.

A. A. Ortmayer & Son are the manufacturers of a pad with a hook something similar to the McClain. This is the only other one I have seen.

398 X Q. 22. Which is the best—the McClain & Anderson hook or the Ortmayer hook?

A. I couldn't say as to that.

X Q. 23. You say that of your sales of pads about one-third is the McClain pad. Isn't it the fact that you don't sell them except when they are especially demanded and you can't put your own in their place?

A. Well, as I keep both kinds I give a man his choice of pads. The majority of them want my own pad sewed in; the balance want what they call the hook pad.

X Q. 24. Are the majority of your customers farmers or city wagoners?

A. The majority of customers wanting sweat pads are farmers.

X Q. 25. What I mean is this: Isn't the demand for the sewed-in pad larger among the farmers than with the city or town wagoners?

A. The farmer being the largest consumer of sweat pads, of course the largest demand would be among farmers.

X Q. 26. There isn't as much profit, is there, in selling the McClain pad as in selling one of your own manufacture?

A. Fully as much.

JOSEPH STEPHEN.

Adjourned to November 3, 1886.

NOVEMBER 3.

Parties met, pursuant to adjournment, same as before.

Counsel for defendants offers in evidence the following documents, to wit:

Letters patent of the United States—

No. 41528, dated February 9, 1884, to Montlear & Tent.
" 48586, " July 4, 1865, to William R. Phelps.
" 87543, " March 9, 1869, to H. E. Churchill.
" 88060, " March 23, 1869, to James L. Moore.
" 91389, " June 15, 1869, to John H. Weeden, assignor, &c.
No. 108,071, dated October 4, 1870, to James F. Walsh; re-
399 issued November 3, 1877, No. 7951.
" 112,713, " March 14, 1871, to Lemuel L. Hull.
No. 129,170, dated July 16, 1872, to Thomas C. Rice.
" 131,816, " October 1, 1872, to Felice Fabrici.
" 143,364, " September 30, 1873, to Marston & Phillips.
" 143,987, " October 28, 1873, to Lindsley & McIntosh.

No. 157,367, dated December 1, 1874, to John M. Bright.
" 160,432, " March 2, 1875, to Holabird & Parks.
" 162,095, " April 13, 1875, to Andrew Ortmayer; reissued February 29, 1876, No. 6969; reissued March 7, 1882, No. 10055.
" 164,200, " June 8, 1875, to Robert C. Nichols.
" 168,957, " October 19, 1875, to Samuels Ayres.
" 187,621, " February 20, 1877, to Edwin W. Grove.
" 198,191, " December 18, 1877, to Lucius Deming, assignor, &c.
" 198,890, " January 1, 1878, to John P. Lindsay.
" 207,694, " September 3, 1878, to Patrick F. Tunny.
" 208,516, " October 1, 1878, to George A. De Zeng.
" 220,550, " October 14, 1879, to Edward Schaub.
" 231,051, " August 10, 1880, to Joel Jenkins.
" 236,857, " January 18, 1881, to John T. Stall.
" 254,983, " March 14, 1882, to Hubert L. Judd.
" 256,977, " April 25, 1882, to George P. Cole.
" 264,947, " September 26, 1882, to Henry R. Heyl.
" 289,392, " December 4, 1883, to Alphonse T. Cwerdinsci.

400 Canadian letters patent—

No. 17269, dated July 13, 1883, to Edward L. McClain.

English letters patent—

No. 1404, of 1783, to Martin Vanbutchell.
" 612, " 1853, to W. E. & W. M. Cochrance.

A certified copy of the file wrapper and copy of the Edward L. McClain patent of June 20, 1882, No. 259,700.

A certified copy of the file wrapper and contents of the Edward L. McClain patent of November 17, 1882, No. 267,011.

A certified copy of the file wrapper and contents of the John Sherling patent of May 10, 1884, No. 298,626.

A certified copy of the file wrapper and contents of the Edward L. McClain patent of March 10, 1885, No. 313,606.

The Andrew Ortmayer patent of December 8, 1885, No. 331,813.

WILLIAM S. BATES, a witness produced, sworn, and examined on the part of the defendants, deposes and testifies as follows in answer to questions by Mr. BANNING:

Q. 1. State your name, age, residence, and occupation.

A. William S. Bates; age, thirty-four years; residence, Chicago, Illinois; occupation, civil and mechanical engineer.

Q. 2. State what experience you have had, if any, in mechanical pursuits, examining letters patent and mechanical devices, and as an expert in patent causes.

A. I have been engaged in mechanical studies and pursuits
401 for some seventeen or eighteen years last past. In the practice of my profession I am daily brought in contact with mechanical devices of various kinds and am required to examine the same critically and analytically for various purposes. I was at one time

engaged as a solicitor of patents and became familiar with drawings and specifications of patents in general, and for a number of years I have been frequently called upon to testify as a mechanical expert in patent causes.

Q. 3. Have you examined the three patents sued on in this cause, No. 259,700, 267,011, and 298,626, and do you understand the inventions described and claimed therein respectively?

A. Yes, sir.

Q. 4. Have you also examined the Andrew Ortmayer patent of December 8, 1885, No. 331,813, and the sweat pad for horse collars offered in evidence in this case as Complainant's Exhibit Defendants' Manufacture, and do you understand them respectively?

A. I have examined and I believe I understand them. The Exhibit Defendants' Manufacture is the same device set forth in the patent.

Q. 5. Have you also examined the various letters patent, both United States and foreign, just offered in evidence on the part of the defendants in this cause, and do you understand the constructions described or shown therein respectively?

A. I have examined and believe I understand them.

Q. 6. Taking up the several patents sued on, please explain the inventions described and claimed therein respectively, and, taking up the various patents and exhibits offered in evidence by the defendants, please state what bearing they have on such inventions or any of them, limiting your answer as to the patents in suit to the first claim of McClain's first patent, both claims of his second patent and the first claim of the Scherling patent. Answer fully, and give your reasons at length for any opinions you may express.

402 A. The three patents sued on all relate to pad fastenings for horse collars. The McClain patent No. 1, of June 20, 1882, sets forth a construction consisting in a piece of steel formed into a C spring at each end and riveted to the pad. The hooks or C-shaped spring ends embrace the fore and back roll of the collar and thus hold the pad in place. In applying and removing the pad the springs are opened sufficiently to take in their respective rolls, and they are closed upon the same by their elasticity. In the drawing the C-shaped ends are marked *s s*. The first claim of the patent is as follows: "As attachments to a sweat or other horse-collar pad the elastic springs *s s*, substantially as described and for the purpose set forth." This I understand to be, in substance, a combination of the two C springs and the horse-collar pad. The McClain patent No. 2, of November 7, 1882, sets forth a construction consist- of a piece of steel or other elastic material having a single C spring formed on one end of it and riveted to the pad. This C spring embraces the fore roll of the collar when the pad is in place. In applying the pad the spring is opened sufficiently to admit the roll, and its elasticity closes it over the roll and keeps the pad in place.

This spring of the McClain No. 2 patent is identical with the fore-roll spring of the McClain No. 1 patent. This is apparent from figure 2 of the two drawings, which show exactly the same thing except that the back-roll C spring of the No. 1 patent is omitted.

The patentee evidently had the same idea, judging from the language of his specification in patent No. 2, which all the way through refers to the No. 1 patent and points out only this difference.

The first claim of this No. 2 McClain patent is "as an attachment to a horse-collar pad or other harness pad and as a means of
403 adjustably attaching a pad to a horse collar or other part of harness, the elastic single-roll or single-curve spring *s*, constructed, arranged, attached, and operating substantially in the manner shown or described and for or with the purposes set forth." This I understand to be, in substance, the combination of the C spring marked *s* with the horse-collar pad. The second claim is substantially the same as the first, being in terms for the combination of the horse-collar pad and the elastic single-roll or curve spring *s*.

The Scherling patent sets forth a device made entirely from one piece of wire, the wire being bent so as to form a skeleton hook, whilst the ends of the wire are sharpened so as to penetrate and fasten the hook to the fabric of the pad. There are several forms shown for the ends of the wire, but the idea in all of them is to stick the ends into the pad and thus fasten the hook to it at any convenient point. The first claim of the patent is "the described safety-pin and hook formed of wire consisting of the bows *b b* and the part *a* connecting the bows with suitable integral devices for attachment to the collars formed upon the ends of the bows, substantially as described." The bows *b b* and part *a* are simply the bows of the front cross-bar which constitute the skeleton hook. The word "collars" in the claim, I assume, should be pads, as the hooks are fastened to the pads and not to the collars. As I understand this claim, it relates solely to a hook formed of wire, with the ends so arranged that they can be inserted into the pad and thereby attach the hook to the pad without any auxiliary fastening devices.

Turning now to the several exhibits offered in evidence—

The Deming patent of 1877 shows and describes a horse-collar pad formed of leather and attached to the collar by two hooks, one
404 of which embraces the fore roll and the other the back roll of the collar. The hooks are formed of the edges of the leather pad, which are bent over for this purpose. The pad is retained in place by the elasticity and stiffness of these edges. As seen in section in figure 2 of the drawing, the fastening arrangement of the Deming patent is exactly like that of the McClain No. 1 patent. There are two hooks, one for each roll of the collar, and these hooks are springs, though not steel springs, as in the McClain. The pad is smaller in the Deming, but this is not material, as it is none the less a pad, and the McClain patent doesn't specify any particular size or kind of pad.

The Weeden patent of 1869 shows and describes a head-rest or pad for the back of a church pew. The pad is fastened to the seat by means of two C springs, which embrace the front and rear of the seat-back. These springs, as is shown in figure 1 of the drawing, are exactly like the springs of the McClain patent No. 1. They are used in exactly the same manner. The only difference is that they fasten the pad to a seat-back instead of to a horse collar.

The Ayres patent of 1875 shows and describes a truss which has a pad provided with two hooks arranged in the same manner as those in the McClain patent No. 1.

The Schaub patent of 1879 shows and describes a cartridge-holder for cartridge belts. The cartridge-holder is made of wire bent into a hook to embrace the shell, and its ends are pointed so as to be inserted into the fabric of the belt. This device is like the hook shown in figure 3 of the Scherling patent, except that the hook portion is adapted to embrace a cartridge shell instead of a horse collar. The Schaub hook is formed of a single piece of wire, like the Scherling, and consists of two bows and a front cross-bar, and has the ends of the wire formed into integral devices for direct attachment to the fabric, just as is the case with the Scherling.

405 The Fabrici patent of 1872 shows and describes a head-rest or pad for the back of car seats. The pad has a frame which is supported on the seat-back by two forks, the forks being formed of the curved-frame standard and a spring. The standard passes behind the seat-back and the spring in front of it, the seat-back being embraced between the two.

The Phelps patent of 1865 also shows and described a head-rest in which a pad is supported on the seat back by means of a C spring, which embraces the back of the seat.

The Churchill patent of 1869 has also a head-rest, which is secured in place by forked-spring standards.

The Holabird & Parks patent of 1875 shows and describes a cartridge-shell holder, having a hook for embracing the edge of the shell and a safety-pin for securing the hook to the belt or other fabric to which it is to be attached. The attachment, by means of the safety-pin is made in the same manner as the attachment of the Scherling device shown in figures 1, 4, and 5 of his patent.

The Nichols patent of 1875 shows and describes a hook for fastening wearing apparel. As shown in figure 3 of the drawing, the hook is secured to a pair of drawers and is hooked over the top of a pair of trousers, thus supporting the drawers in position in very much the same way that a collar-pad hook supports the pad in its position in reference to the collar.

The Moore patent of 1869 shows and describes a pencil-holder for attachment to a coat or vest. It consists of a piece of spring wire bent so as to form a clamp to hold the pencil and also so as to form a safety-pin for attaching the pencil-holder to the coat or vest. The attachment is made in the same manner as in the Scherling patent, by passing the end through the fabric as illustrated in figures

406 4 and 5 of the Scherling patent.

The Rice patent of 1872 shows and describes an eye-glass supporter, which has a spring hook to which the eye-glass is hung and an integral device, consisting of two sharpened hooks, which are inserted into the fabric of the vest and attach the hook to it. If made of the proper size, this Rice device would constitute a McClain No. 2 patent pad fastening, attached to the pad after the manner of the Scherling patent.

The Cwerdinski patent of 1883 shows and describes a spring

pencil-holder, consisting of a spring hook for embracing the pencil, and integral devices, consisting of prongs, which are stuck into the clothing and attach the device to it.

The Tunny patent of 1878 shows and describes a clasp consisting of a ring, and integral devices, consisting of sharp points which enter the fabric and fasten the ring thereto.

The Jenkins patent of 1880 shows and describes an eye-glass hook formed of a single piece of wire bent into a hook and having its ends bent into a safety-pin for attachment to the fabric. This device is exactly the device of figure 1 of the Scherling patent, except as to the breadth of the hook. If made of the proper size, this Jenkins device could be used in place of the Scherling, and in the same manner. The Exhibit Jenkins No. 3 is an embodiment of what is shown and described in the Jenkins patent, and the same remarks apply to it.

The Judd patent of 1882 is a substantially similar device to the Jenkins, and the same remarks apply to it as to the Jenkins patent.

The Montleart & Tent patent of 1864 shows and describes a similar device to the Jenkins, with the exception that it is made
407 of two pieces fastened together instead of one single piece. The same remarks apply to this Montleart & Tent device as to the Jenkins. Exhibit Saltsman No. 11 is a substantially correct embodiment of the Montleart & Tent pin as shown in figure 1 of their drawing.

The Marston & Phillips patent of 1873 shows and describes another device of the same general character as the Scherling, the Jenkins, the Judd, and the Montleart & Tent, namely, a tag hook. It is a device having a safety-pin at one end for attachment to a piece of cloth, and a loop or hook at the other to hang a tag on, all formed out of the same piece of wire.

The Heyl patent of 1882 shows and describes a hook for the suspension or attachment of any desired object, and a suitable integral device, consisting of a plate coated with adhesive substance for securing the hook to some other object.

The Grove patent of 1877 shows and describes a pencil-holder consisting of a spring coil of wire, the ends of which are turned outward and sharpened so as to form two prongs to be inserted into the coat or vest or other fabric and attach the device thereto. The method of attachment in the Grove device, as shown in figures 1 and 3, is identical with that indicated in the Scherling device in figure 2 of the drawing.

The Bright patent of 1874 shows and describes a horse collar having a pad which is attached thereto by means of straps passing around the collar.

The De Zeng patent of 1878 shows and describes a horse collar having attached thereto a pad for the usual purpose. The collar also has a pad at its upper part, which pad is provided with a hook. This latter pad is attached to the collar by means of loops and metal straps.

408 The Stall patent of 1881 shows and describes a pad having a hook riveted to it and attached to a horse collar.

The Walsh reissue of 1877 shows and describes a pad for attachment to a horse collar by straps passing around the collar.

The Cole patent of 1882 shows and describes a horse-collar pad attached to the collar by means of wires passing around a wire bead on the edge of the pad and having their ends inserted into the collar so as to attach the pad thereto. This resembles the Scherling patent, in that the fastening wires are inserted into the object to which they are to be attached. They are inserted into the collar instead of into the pad, and in this respect follow the language of the Scherling patent rather than the drawing, which shows them inserted into the pad.

The Hull patent of 1871 shows and describes a horse-collar pad which is to be attached to a collar by straps and loops passing over the collar.

The Ortmayer reissue of a patent granted in 1875 shows and describes a pad attached to a gig saddle by means of a loop on the pad which is engaged by a hook on the saddle. This patent shows the use of a hook for connecting a pad with a piece of harness. The hook is not a spring hook, as shown in the McClain patents, but is a stiff hook. It is used for the same purpose, however, namely, the connection of a pad and harness.

The Lindsay patent of 1873 shows and describes a safety-pin formed of a single piece of wire. The Exhibit Ortmayer No. 12 is an exact embodiment of the Lindsay pin as shown in figure 2 of the patent drawing. These pins, of about the size of Exhibit No. 12 or a little larger, are commonly used for blanket pins for fastening blankets on horses. I have myself used them in that way prior to 1882.

409 The McClain Canada patent of July 13, 1883, shows and describes the exact structures of the two McClain patents sued on; it also sets forth a pad-fastening hook formed of a single piece of wire of the form of the Scherling hook, but differing from the latter in the manner of its attachment to the pad. The Scherling patent hook is attached to the pad by integral devices which enter the pad, while the McClain Canada patent hook is fastened to the pad with rivets.

The Cochrane English patent of 1853 shows and describes a saddle pad having hooks attached, which hooks engage the saddle and keep it and the pad in their respective positions. In use the pad is girded to the horse and the saddle is girded on the top of the pad so as to engage the hooks. It does not appear whether or not the hooks are spring hooks, but they are in combination with the pad and the saddle just as the McClain and Scherling hooks combine the pad and horse collar.

Adjourned till November 4, 1886.

NOVEMBER 4, 1886.

Parties met, same as before, pursuant to adjournment.

The Van Butchell patent of 1783 describes the use of springs for various purposes. Among others it describes the spring fastening

for a bridle of a harness. This consists of a rim, like a buckle rim, with a bar across the middle, with three round-pointed pins, which enter the leather and secure the device to it.

The Exhibits Jenkins Nos. 1, 2, and 3 and the Exhibit Berbecker No. 10 are curtain or lambrequin hooks, or eyeglass hooks, similar in general construction to those of the Jenkins and Judd patents, and the remarks made with respect to the Jenkins and Judd patents apply to them. The Exhibits Jenkins Nos. 2 and 3 are ex-
410 actly like the Jenkins patent. Jenkins No. 1 and Berbecker No. 10 differ only in being composed of two pieces of metal.

The Exhibit Holt No. 6 is a curtain ring adapted to slide on a pole, the curtain being hung to it by means of hooks similar to Jenkins No. 1, which are fastened to it by the safety-pin, just as in the Scherling patent the hook is secured to the pad by its safety-pin. The hook hooks into the eye of the Holt No. 6, thus connecting the curtain to the ring. Exhibit Jenkins No. 5 is a curtain hook adapted to be used with a ring like the Holt No. 6. It has a loop in place of a safety-pin for connecting it to the curtain.

Exhibit Burbecker No. 9 represents a snap hook with a safety-pin for connecting it to a fabric, the pin and hook being made of different pieces of metal. In addition to its use as a snap hook the Berbecker No. 9 could be used as a pencil-holder just like that of Cwerdinski patent, and the latter would make a good snap hook like the Burbecker No. 9.

The Exhibits Holt No. 7 and Holt No. 8 represent or are picture hooks. These hooks are intended to hook over the bar or moulding on a wall, just as the collar pad hooks in controversy hook over a rod or moulding in a horse collar. The second hook in these exhibits is intended to receive the picture cord which holds the picture.

In addition to these several exhibits it has been common for a great many years to use hooks attached to curtains for supporting the curtains on a rod, the hooks being caught over the rod just as the pad hooks in controversy are caught over the roll of a collar. I have known of such use myself for upwards of ten years in sleeping cars, and they are still used in that way in such cars—that is, they are attached to the curtains, and when the curtains are put in place the hooks are caught over a rod and support the curtains
411 from it. This rod is a trifle larger than the roll of a horse collar, but not so much so but what the McClain patent spring hooks could be used on it if they were attached to the curtain instead of to a collar pad, as their elasticity would permit them to expand and embrace the rod.

To sum up, I find from these several patents and exhibits, not only that horse collars and horse-collar pads were old devices, but that these pads have been secured to the collar or other part of the harness to which they were applied by means of hooks, as in the Ortmayer reissue, McClain Canada patent, and Cochrane English patent; also that the pads have been provided with hooks for the attachment of other devices, as in the De Zeng; also that pads had been attached to collars by means of two elastic hooks acting like the hooks of McClain's No. 1 patent, as is shown by the Deming patent. I also find that

it was a common thing to attach hooks to a fabric or device for connecting it to another device, and these hooks very often perform their function by hooking over a rod or moulding similar to the fore roll of a horse collar, as in the picture hooks, sleeping car curtain hooks, the Phelps head-rest patent, and numerous others; and I also find that it was common to have such hooks attached to the fabric they were intended to support by means of integral devices, which entered the fabric after the manner of the Scheling patent, as is shown by the Rice, Cwerdinski, Jenkins, Grove, Montleart, and Tent, Judd, and other patents, and by the Exhibits Jenkins 1, 2, and 3 and Berbecker 9 and 10. It was also common to construct hooks of wire, as the Scherling hook is, as shown by many of the exhibits.

Among these numerous exhibits I find in Weeden patent and in the Ayress patent the exact construction of fastening of the
412 McClain No. 1 patent, with the exception that in the Ayres the hooks are not spring hooks; in the Weeden they are spring hooks. In the Deming patent I find the McClain No. 1 devices, with some slight structural variations in the hooks. In my opinion any ordinary mechanic skilled in this art would adapt the Weeden arrangements and put it on a pad and use it in the place of the Deming pad-fastener without the exercise of any invention.

In nearly all of the exhibits I find the use of a single hook for catching over a moulding or other object or other objects in a manner more or less similar to that of the McClain No. 2. This being the case, and the McClain No. 2 device being in all respects exactly like the McClain No. 1 cut in two, it required no invention to take the McClain No. 1 device and remove the back hook from it, thus producing the McClain No. 2, and, in my opinion, any ordinary mechanic could make this change without exercising the inventive faculty.

The Holabird & Parks, the Moore, the Rice, the Cwerdinski, the Jenkins, the Grove, the Marston & Phillips, the Montleart & Tent, and the Judd patents all show the same or very similar means of attaching hooks or other devices to fabrics as those of the Scherling patent, namely, safety-pins and wire points, which enter the fabric itself. The McClain Canada patent shows exactly the Scherling hook with the exception of the safety-pin part of it. This being the case, it certainly required no invention to provide such a hook with the well-known and common safety-pin feature for attaching it to the pad, especially as no change would be required in either construction, function, or purpose of said safety-pin attachment.

Q. 7. State whether or not, in your opinion, the Ortmayer sweat pad and fastening as shown in the Complainant's Exhibit Defendants' Manufacture contains, embodies, or applies the inventions or improvements described and claimed in the several patents
413 sued on, Nos. 259,700, 267,011, 298,626, or any of them, limiting your answer to the claims specified in my last preceding question and giving your reasons fully for any opinions you may express.

A. The Exhibit Defendants' Manufacture does not contain, embody, or apply the inventions or improvements set forth and claimed

in the three patents sued on. My reasons for saying this are as follows, and in giving them I will limit myself to the claims enumerated in the last preceding question.

The construction of the defendants' manufacture is as follows: The pad is provided at its top with a leather loop, which I understand to pass over the top of the collar and keep the upper part of the pad in place. The lower part of the pad is kept in place by means of a hook on each wing of the pad. These hooks are made of stiff wire, but round, so as to form a skeleton hook of suitable shape to embrace the fore roll of the collar, and having its ends extending laterally, so as to form journals or bearings for the hook to rock on. A leather loop encircles these projecting ends and is riveted to the pad.

The first claim of the McClain No. 1 patent is for elastic springs, marked *s s*, as attachments to a sweat or other horse-collar pad. Comparing the defendants' manufacture with this McClain No. 1 construction, I find the following very material differences between them: The McClain hooks are spring hooks, and necessarily so, as otherwise they would be entirely inoperative. The defendants' hook is not a spring hook at all, but is perfectly stiff and unyielding. McClain has two sets of hooks, one for the front and one for the back roll of the collar. Defendant has only one, namely, for the front roll, and has no fastening for the back roll. Besides
414 these differences it may be noted that in the McClain it is the upper part of the pad which is connected to the collar by hooks, whilst in the defendants' it is the lower part.

For the reasons, therefore, that the defendants' manufacture has only single hooks, and that these hooks are not springs, but are stiff and inelastic, I say that it does not contain the invention defined in the first claim of the McClain patent No. 1.

The McClain patent No. 2 claims the combination, with a horse-collar pad, of elastic single roll or single curve spring *s*. Both claims are the same, so far as concerns the matters here in controversy, and may be treated together. Comparing the defendants' manufacture with this No. 2 McClain patent, I find that the McClain hook is described as being a spring, and is necessarily a spring, as otherwise it could not be got over the roll of the collar. This is apparent from figures 1 and 4 of the drawings, which show clearly that the hook must be opened somewhat to get it over the roll. In the defendants' manufacture the hook is stiff and inelastic, and is so shaped that it will take in the roll without being opened. This capacity of the defendants' hook of taking in the roll without spreading is due partly to its method of attachment to the pad, which permits it to oscillate back and forth, as well as to the shape of the hook. The McClain hook, being riveted solidly to the pad, is incapable of such oscillation. If the McClain hook were so shaped as to admit the roll without spreading it would not be a success as a fastener, for the reason that it would not sufficiently embrace the roll.

For the reasons, therefore, that the defendants' hook is not a spring, as McClain's is, but is stiff, and that this difference involves

serious differences in capacity and mode of operation, I say
415 that it does not contain the inventions defined in the two claims of the McClain patent No. 2.

The first claim of the Scherling patent is for the safety-pin and hook formed of wire, consisting of bows *b b* and connecting part *a*, with suitable integral devices for attachment to the pad. Figure 2 in the drawing shows the form which most nearly resembles the defendants' device. In figure 2 the ends of the wire extend laterally, forming prongs which enter the fabric of the pad and attach the hook to it. That these prongs are intended to enter the fabric is clear from the fact of their being sharpened for that purpose, from the language of the specification, and from figures 4 and 5 of the drawing, which show one form, to wit, that of figure 1, attached to the pad by the insertion of the prong into the fabric, from the use of the word "integral" in the claim—any other method of attachment would not be "integral"—and from the fact that no other method of attachment is shown or suggested. The specification states that the hooks are to be made of steel or other elastic wire. This, in connection with the close mouth of the hook, which is most clearly shown in figure 4, indicates that the hooks are to be spring hooks and not stiff hooks.

Comparing the defendants' manufacture with this Scherling patent, they are evidently very different. The defendants' hooks are stiff and the Scherling elastic. Defendants' hooks have no prongs. The lateral extensions of the ends of the wire are not such prongs as are shown in Scherling's figure 2. They are not sharpened. They are not intended to be inserted into the fabric, and are not adapted to be used in that way. Besides this, the defendants' hooks are not attached to the pad by any integral devices, but by the use of separate and distinct devices, to wit, leather loops and rivets, and
416 these are obviously necessary for the practical attachment of the hook. It is for these several reasons that I say the defendants' manufacture does not contain the Scherling invention as defined in the first claim of his patent.

To conclude, the defendants' manufacture is different from each of the patents sued on. It is applied in a different way, it operates in a different way, and it is not even the mechanical equivalent of any of the forms shown or described in these patents.

Q. 8. Does or does not the term "spring" or "springs" have a clearly defined and well-understood meaning in mechanics?

A. Yes, sir; it has.

Q. 9. As thus defined and understood, can the Ortmayer hook possibly be considered a "spring"?

A. No, sir; it cannot.

Q. 10. Please state whether the Scherling patent sued on is clear and exact in its specification or first claim.

A. It is not. There are a great many ambiguities in the specification and first claim. For example, the specification says, "Fig. 4 is a perspective view of a part of the collar," whereas it is really a view of part of the pad. In line 43 it says, "It is attached to the collar in the manner aforesaid." The word collar should be pad,

probably, as the devices are not attached to the collar, but to the pad, and the specification does not describe any attachment to the collar, so that the words "in the manner aforesaid" refer to nothing unless the word collar means pad. In the claim I find the same use of the word "collar" for "pad." Besides this, the language or punctuation of the claim is very faulty.

Q. 11. Do you consider the manner of attaching the safety-pin to the pad, shown in figure 2 of the Scherling patent, as a practical or useful one, and especially would it be so if the laterally pro-
417 jecting prongs were made as in the Ortmayer hook?

A. In the latter case it certainly would not be, and in any case it is of very-doubtful utility.

Cross-examination by Mr. MOORE:

X Q. 12. Would you consider the phrase "spring hook" equivalent to a device thus described: "It is made entirely of steel or other elastic wire"?

A. A device described in that way might be a spring hook, in which case the term would mean such a device.

X Q. 13. Would you consider the phrase "curved metallic spring" as equivalent to this: "It is made entirely of steel or other elastic wire curved in the form of bows"?

A. If they both referred to hooks they would be equally a spring.

X Q. 14. If the hook on Complainant's Exhibit Defendants' Manufacture "is made entirely of steel or other elastic wire curved in the form of bows" is it a spring? I want you to assume as the question does.

A. If that language applied to it it would be a spring, but it does not apply to it.

X Q. 15. Are you afraid to answer the question categorically? I will put it again: If the hook on Complainant's Exhibit Defendants' Manufacture "is made of steel or other elastic wire curved in the form of bows" is it a spring?

A. It is, but it is not made of such wire.

X Q. 16. Is there such danger that the court will mistake the character of wire of which it is made that you find it necessary to aid the above qualification, although requested to give a categorical answer?

A. The court might mistake it; at any rate, I thought it well to make the answer complete.

X Q. 17. I will repeat cross-question 15 and ask you to give a categorical answer, omitting any instructions to the court.

418 A. As I understand the words "categorical answer," they mean an answer which is complete in itself and not liable to misinterpretation, and that is what I have been trying to give. If I am mistaken in my understanding please explain wherein, and then I will try again.

X Q. 18. Cross-question 15 repeated, and the witness is asked if he can answer it with a "yes" or a "no" to do so.

A. I am not afraid to answer categorically. A device so constructed would be a spring. Question 15 cannot be answered with

yes or no without danger of being misunderstood, because it is a double question.

X Q. 19. Upon the assumption that the Ortmayer device in question is so constructed and is a spring, which assumption I wish you to make for the purpose of this answer, would it contain the invention recited in the first claim of McClain patent No. 1, first and second claims of McClain patent No. 2, and the first claim of the Scherling patent?

A. No, sir; it would not. It might possibly be within the McClain No. 2 patent, but I do not think it would be, because its spring quality would have no function to perform.

X Q. 20. Assuming as before, and further assuming that its spring quality has a function to perform of the same kind as the hook in McClain patent No. 2, under these hypotheses would defendants' manufacture contain the inventions claimed in McClain patent No. 2?

A. In that case it would.

X Q. 21. You have stated substantially that there is no invention shown in either of the three patents upon which the suit is brought. What is your opinion with reference to the Ortmayer patent in this regard, recollecting its position in the art—that is, that it is subsequent to complainant's three patents in time?

Objected to, as the Ortmayer patent is not on trial.

419 A. I have not examined the Ortmayer patent with this question in view, and therefore am not prepared to say.

X Q. 22. Examine it and give the court the benefit of your opinion upon this question.

A. The Ortmayer patent in the first claim embraces as an element the leather loops, marked E, which attach the wire hook to the pad. The second claim contains as an element this leather and an extension of the same along the wire hook. The third claim embraces as an element a certain safe-piece G and a loop F. None of these parts are shown in the prior arts exhibited in this case, nor, so far as I know, anywhere else, and therefore I think there is invention in the Ortmayer patent.

X Q. 23. You have examined quite a number of patents on safety-pins. Do these patents, or any of them, and which, show or describe any patentable invention?

A. Some of them do, no doubt, and some of them not. Speaking generally, I should say the Lindsay patent, the Judd patent, the Montleart & Tent patent, and the Jenkins patent show invention.

X Q. 24. What is your idea as to how old the general idea of a safety-pin is?

A. It is somewhat old. I should think fifteen years or more.

X Q. 25. If any exhibit, patent or otherwise, has been placed before you in this case, including, of course, complainant's patent and Ortmayer patent, which shows, describes, or suggests in it three separate articles, viz., horse collar, a pad to go under the horse collar, and a metallic hook to be attached to the pad in any way and shaped to grasp over one or both rolls of the collar detachably, thus secur-

ing the separate pad and collar together regardless of whether such coupling device be rigid or elastic, please point to any and all such exhibits, if any there be.

A. The McClain Canadian patent is such a one; the Coch-
420 rane English is such a one, except that the collar is a saddle; a number of the other patents show and describe three separate articles, one of which is a hook to connect the other two.

X Q. 26. The McClain Canadian patent being one of the complainant's patents and subsequent in date to McClain's patents Nos. 1 and 2, upon which the bill in this cause is in part based, it is excluded from the category, and was so intended by the form of the last question, so that I understand you that there is none of the patents introduced to show the state of the art that shows those three articles as defined in the last question, the Cochrane English patent showing a saddle and saddle girth only? Am I right about this?

A. The Cochrane patent shows the pad and girth with a hook on the pad to engage the saddle. The saddle is not shown in the drawing, but is described in the specification. The McClain Canadian patent is prior in date to the Scherling patent. It has collar pad and hook. With these exceptions you are right.

X Q. 27. Then I understand it to be your opinion that, notwithstanding the safety-pin is shown in the Montleart & Tent patent of 1864, nevertheless the Lindsay patent of 1878 for safety-pins, the Jenkins patent of 1880 for safety-pins, and the Judd patent of 1882 for safety-pins all show patentable inventions, but that the McClain patents Nos. 1 and 2, although they contain the first suggestion shown in the art of the combinations recited in cross-question 25, and although there is no evidence as yet in the cause that this combination was ever before known or used, still it is your opinion, as I understand you, that neither of these patents show any invention; and, further, it is your opinion that the Ortmayer patent,
421 which only adds a leather hinge to compensate for the weakness of the cloth shown in the Scherling, but is otherwise attached to the pad, in accordance with the McClain patents, does show patentable invention?

A. Not exactly. Several of the prior patents show pads attached by means of hooks to other devices—the Deming patent of 1877 shows a combination of horse-collar pad and hooks—so that not only was the combination of these three separate things old, but hooks and pads and hooks have been used in analogous ways for many years, and the adoption by McClain of this arrangement was a mere analogous use of an old device. Were it not for the Weeden patent the McClain patents might possibly be sustained if limited to spring hooks as distinguished from hooks like defendants, which are not spring hooks. But even when so limited the McClain patents show a mere analogous use of the Weeden and Deming devices.

Adjourned to November 5, 1886.

NOVEMBER 5, 1886.

Parties met pursuant to adjournment.
Present: Same as before.

X Q. 28. As I understand your last answer, it is an affirmative of the question and the recitals in the question, except the recital which is in substance that prior to McClain's first patent there was no suggestion in the art of a collar attached to a separate pad by a separate metallic hook. To this recital you take exception and refer to the Deming patent as showing these three separate and distinct devices. As you will find upon closer inspection that there is no separate metallic hook or any metallic hook whatever shown or described in the Deming patent, and that it contains no pad, unless a piece of leather with edges crimped around the collar be considered such, and the Weeden patent, the only other patent to which you refer, shows neither collar nor pad, and of course no device
422 to connect a collar with a pad, *and* I ask you again if the recitals in the former question are not strictly and accurately true.

A. Yes, sir.

X Q. 29. Do I understand you to mean by your statement in answer 27 in reference to the Weeden patent that it comes more nearly to an anticipation of the inventions shown in McClain's patents Nos. 1 and 2 than any other of defendants' exhibits?

A. It is more like the McClain patent No. 1 than any of the other exhibits, because it is the exact thing described and claimed in that patent applied to a seat-back instead of a horse collar.

X Q. 30. Summing up your idea of the invention in the two McClain and Scherling patents, I understand you to say that neither of them contains patentable invention; that the second McClain patent does not, because all that is done there is the cutting of the spring shown in the first McClain patent in two, and that the first McClain patent does not contain invention because, as you say, the Weeden patent shows the exact spring shown in it, and the Scherling contains no invention because the thing described in it is shown in the Jenkins No. 3 exhibit and some of the patents for safety-pins. Does this correctly represent what you have intended to say?

A. That is correct so far as it goes.

Redirect examination by Mr. BANNING:

R. D. Q. 31. Do you consider that the Deeming patent shows a pad; and, if so, do you consider that it is attached to the collar in a way practical for use?

A. I do consider that it shows a pad. It is not a cushion, but it performs one important function of a pad. It prevents the rubbing or chafing of the collar against the animal's skin. I consider that it is attached in a way practical for use. Leather when formed into the shape shown in the Deming patent is very elastic, and
423 the hooks b b^1 of the Deming patent would sufficiently hold the pad in place owing to their double curvature, and yet be elastic enough to be snapped over the collar in putting the pads in place.

R. D. Q. 32. Referring to your answers to cross-questions 27 and 28, why do you consider the safety-pin patents therein named as probably valid, and the McClain and Scherling patents sued on as probably invalid?

A. The safety-pin patents each relate to some specific improvement on the general subject-matter, which improvement is not shown in the prior art, and the patents are each valid when limited to the improvements which it recites. If it were attempted to construe these patents so as to cover something older than and different from what is set forth in them, as is done with the complainant's patents, they would not be valid, for they would not then claim a subject-matter having patentable novelty.

R. D. Q. 33. By this I understand you to mean that in order to sustain the several patents referred to, considering their position in the art, it is necessary that they be limited sharply to the specific forms and improvements shown, and that you consider this especially true with reference to the patents sued on. Is this correct?

Objected to as leading and an unnecessary instruction to the court.

A. Yes, sir; that is correct.

R. D. Q. 34. Is not the size and bend of the wire material to be taken into consideration in determining whether the Ortmayer hooks have elasticity?

A. Most decidedly. A hook which is not at all a spring hook might, if made of thinner wire, be a spring hook. The wire composing them is so thick that they have no elasticity such as would constitute them springs.

R. D. Q. 35. In your general answer on the question of infringement you refer to hooks catching over poles or mouldings, as,
424 for instance, in the case of the sleeping car where the curtain hook catches over a metallic pole extending lengthwise of the car. Do you consider that there is any material difference whether the hook catches over a horizontal pole or moulding or over a practically vertical pole or moulding, as, for instance, the fore roll which I will refer to as the moulding of a horse collar?

A. I do not. This is especially true where the vertical moulding is the fore roll of a horse collar, because the shape of the collar holds the pad in position, and the hook simply acts to prevent its moving laterally away from the moulding, just as in the case of the horizontal pole the hook prevents the curtain moving laterally in respect to the pole.

Recross-examination by Mr. MOORE:

R. D. X Q. 36. In redirect answer 31 you speak of "the hooks b b^1 of the Deming patent." These things you call hooks are projecting crimps upon the edge of a thick piece of leather, which are produced in the leather by the ordinary creaser used by the harness-maker. Isn't that right?

A. They are called crimps in the patent. The patent doesn't say how they are produced. I should think they were rather large and

full to be produced in that way. I should say they were probably made by wetting the leather and straining it over the collar, and letting it dry in that position.

R. D. X Q. 37. This would make the piece of leather which you call a pad in the Deaming patent adhere very close to the collar, wouldn't it?

A. It would be apt to make a close fit.

R. D. X Q. 38. Consistent with such close fit, there could be no movement of the collar within the pad?

A. It would be free enough to allow some motion.

425 R. D. X Q. 39. Now, isn't it a fact that with a pad made of such thick leather as would be required to permit such crimp to be made and fastened so rigidly to the collar that it would serve no useful purpose whatever; that while it would, of course, prevent the collar from chafing the horse, it would itself present the same rough and unyielding surface to the neck of the horse and subject it to all the motions of the collar, and be as apt to chafe the horse as the collar would if it were omitted?

A. It would not be as good as the pad in the Exhibit Defendants' Manufacture, but it would be better than no pad at all. The leather would be sufficiently elastic, even when fitted close onto the collar, to permit the collar to work more or less on the pad without the pad following all its motions.

R. D. X Q. 40. Calling your attention to cross-question 32, you state, in substance, that certain of the patents on safety-pins are, in your judgment, valid, viz., contain inventions, but that if it was attempted to use them for the purpose of enjoining the manufacture of other safety-pins more or less different in construction they would not be valid. Do I understand you to mean by this with its context that the McClain patents, in your judgment, are valid for the precise things shown, but not valid unless for the precise things shown?

A. They certainly are not valid if construed broadly. They might possibly be construed so as to cover only the precise thing which they show and describe and then be valid, but I have my doubts of even that. It seems to me the Weeden device is so like the McClain No. 1 that there is no patentable difference between them. The McClain No. 2, if limited to the exact thing which it shows—namely, a spring fastened rigidly to the pad—might be valid; but I do not think it contains any invention over the McClain No. 1, as it is exactly the same thing with one hook omitted. I see no

426 chance of construing the Scherling patent so as to distinguish it from prior devices.

R. D. X Q. 41. Your conclusion with reference to Scherling is based upon the fact that if it be valid at all the Ortmayer infringes it. Is not that right—that is to say, that you don't see any chance of Ortmayer escaping from it if it be valid for any purpose?

A. No; I don't see how it can be construed so as to include Ortmayer, in view of the language used in the specification and claims.

WM. S. BATES.

In reply to an inquiry from complainant's counsel the defendants' counsel states that the defendants have now closed their evidence.

427 STATE OF ILLINOIS, } ss:
Cook County, }

I, Frank L. Douglas, a notary public in and for said county, in the State aforesaid, hereby certify that all the proceedings aforesaid were had as stated in the cause named in the caption hereto; that I was attended by the counsel named in said caption at the time and place therein stated and by the witnesses, Ervin Saltsman, Charles P. Parish, Peter Seyl, Elijah P. Peacock, George Atzel, Andrew Ortmayer, Benjamin C. Blowney, Joseph Stephen, and William S. Bates, who were of sound mind and lawful age respect*fully*; that said witnesses were first severally duly sworn to testify the truth, the whole truth, and nothing but the truth in said cause; that their depositions were reduced to writing in their presence and from their statements respectively, and that after the same were carefully read over to them respectively they subscribed the same in my presence as and for their depositions in said cause. I further certify that I am not solicitor or of counsel for either of the parties in said cause.

In witness whereof I have set my hand and notarial seal this eighteenth day of November, A. D. 1886.

FRANK L. DOUGLAS,
Notary Public.

[SEAL.]

429 UNITED STATES PATENT OFFICE.

EDWARD L. MCCLAIN, of Greenfield, Ohio.

Pad for Horse-Collars.

Specification forming part of Letters Patent No. 259,700, dated June 20, 1882; application filed April 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented a new and useful horse-collar sweat-pad, of which the following is a specification:

My invention relates to that class of horse-collar pads which are placed between the collar and the horse's shoulders and are adjustably attached to the collar and known as "sweat-pads."

The object of my invention is to produce a sweat-pad for a horse-collar which can be easily and readily attached to or taken from the collar, and which can be fitted to collars varying in size.

(Here follows diagram marked p. 428.)

Figure 1 is a view of my sweat-pad shown in connection with those portions of a horse-collar which will best illustrate the use of my improvements. Fig. 2 is a perspective view, showing one of the steel springs as attached to the pad. Fig. 3 is a view of the section of the pad coincident with the plane touching the side of the spring,

(No Model.) 428

E. L. McCLAIN.

PAD FOR HORSE COLLARS.

No. 259,700. Patented June 20, 1882.

Fig. 1.

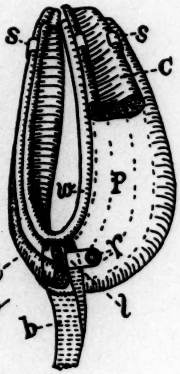

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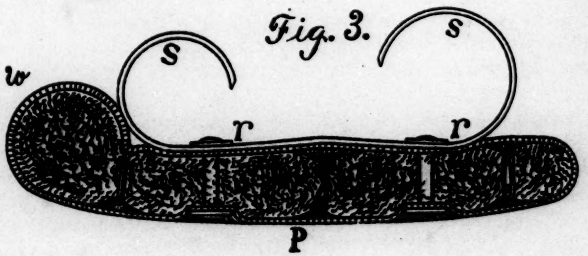
Fig. 4.

Fig. 2.

Fig. 3.



Witnesses:
Frank Blezer
A M Mackerley

Inventor:
Edward L. McClain
by E. P. Robbins,
att.

and is intended to show how the springs are attached to the pad. Fig. 4 shows the gullet of the pad with the billet-loop *l* for the choke-strap billet attached thereto.

The pad proper is made so as to form an intermediate cushion between the collar and the horse's shoulders and of a size such as to entirely isolate the collar from all portions of the horse's shoulders. The surface material is made of suitable coarsely-woven material, such as bag-cloth, which, besides absorbing moisture, will be permeable to air. The pad is plain, with the exception of a fore wale or small roll, *w*, and is stuffed with hair and is stitched in the usual manner.

The sweat-pad, as just described, is not claimed as a new invention. My improvements consist in the addition of springs *s s* and choke-strap billet-loop *b*. The top ends of the pad sides or bodies are adjacent the withers of the neck, and are provided with elastic springs—steel—which are so made as to be capable of being opened and then clasped around the body of the sides of the collar. Thus one end of a spring is so curved as to partly encircle the fore wale or small roll of the collar and to hug it so closely as to keep out of the way of the hame, and the other end is so curved as to similarly partly encircle and hug the after wale or body side of the collar and yet not interfere with the hame. Such construction will enable the pad to be easily and readily attached at its top ends to the top ends of the collar, and also will permit of attachment at variable positions along the sides of the collar, so that it can be easily fitted to collars of different sizes.

The choke-strap billet-loop *l* is intended to serve to attach the gullet of the pad to the gullet of the collar, while permitting the billet of the choke-strap to encircle the gullet of the collar and not that of the pad, and hence be isolated by the pad as a cushion from coming in contact with the horse's neck.

Where no choke-strap is used a billet can be used to keep the pad in position at the gullet, or the loop need not be employed, as the springs will keep the pad fast to the collar.

In the figures, P indicates the pad; C, the collar; *w*, the forewale of the pad; *s s*, the elastic springs; *l*, the choke-strap billet-loop; *b*, the choke-strap, and *r r* the rivets used to attach the springs or the loop to the pad.

In Fig. 3 the method of attaching the springs to the pad is shown, and also the shapes of the curved elastic clasps or springs. As may be seen, the rivets *r r* pass entirely through the pad and springs *s s* in such a manner as, while securing the springs to the body of the pad, at the same time serve to bind the two sides of the body of the pad firmly together, and hence make that part of the pad to which the springs are attached extra strong and firm; but it would not deviate from my invention to pass the rivets through the surface material in contact with the springs alone, or to use a stiffening-piece on the inside or outside of said surface-piece, or between the two surface-pieces, or both between and without said surface-pieces.

In Fig. 4 the method of attaching the choke-strap billet-loop to the gullet of the pad by means of rivets is illustrated, and what is

asserted in the preceding paragraph as to the attachment of the springs by means of rivets is true in reference to the attachment of said loop by means of rivets, but at the same time
430 other methods of attaching the loop—as by stitching—may, if desirable, be employed. I think leather the best material for said loop.

What I claim as new, and desire to secure by letters patent, is—

1. As attachments to a sweat or other horse-collar pad, the elastic springs *s s*, substantially as described, and for the purposes set forth.

2. The combination, in a sweat or other horse-collar pad, of the springs *s s* and of the choke-strap billet-loop *l* with the collar-pad, substantially as described, and for the purposes set forth.

EDWARD L. McCLAIN.

Witnesses:
FRANK BLAZOR.
A. M. MacKERLEY.

432 UNITED STATES PATENT OFFICE.

EDWARD L. McCLAIN, of Greenfield, Ohio.

Pad for Horse-Collars.

Specification forming part of Letters Patent No. 267,011, dated November 7, 1882; application filed August 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented new and useful pads for horse-collars and other parts of harness, of which the following is a specification.

My invention relates to a device for attaching pads to horse-collars and other parts of harness where adjustable temporary pads are used.

The object of my invention is to furnish more perfect means of adjustably attaching pads to horse-collars than those yet devised, and the means now to be described are improvements upon those described and claimed in my patent for "pads for horse-collars," dated May 19, 1882, reference to which should be made in order to better understand the means herein described; and it is also my object to make such means applicable to other harness-pads.

While my improvements are intended to be applicable to various kinds of pads for horse-collars and other parts of harness, they are especially intended to apply to sweat or cushion pads which are placed beneath or under the collar and isolate the collar from the horse's shoulders and neck.

(Here follows diagram marked p. 431.)

Figure 1 is a sectional view of a pad and a collar coincident with one side of the spring S. Fig. 2 is a perspective view of a portion of a pad with spring S attached.

(No Model.)

E. L. McCLAIN. 431

PAD FOR HORSE COLLARS.

No. 267,011. Patented Nov. 7, 1882.

Fig. 1.

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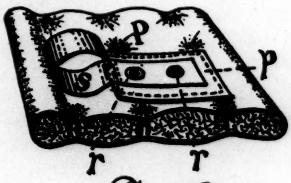

Fig. 2.

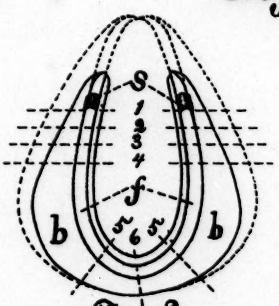

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6

Fig. 7.

Witnesses:
A. M. Mackerley
Wm. Clouser

Inventor:
Edward L. McClain
per E. P. Robbins, att.

Fig. 1 shows a section, P, of such a pad, with a fore roll, and to which is attached a curved metallic spring, S, which is so curved as to partly encircle and hug the fore roll of the horse-collar C, so as to hold that portion of the pad securely to the collar and yet not interfere with the hame. Said spring S differs materially from the spring in my previous patent. First, this spring has but one curved portion, intended for the fore roll only of the collar, instead of a curved portion for the fore roll and one for the back roll. The single-roll spring is applicable where the two-roll spring could not be used, and is preferable and cheaper even where the latter can be used.

By referring to Fig. 3 it will be easily seen that the fore roll, *f*, is approximately of uniform size in cross-section in the same collar, while the back roll, *b*, varies considerably in the size of its cross-sections 1 2 3 4 5 6, &c., increasing continually to near the bottom, where it gradually narrows again until it becomes quite small at the gullet. Hence it is seen that the spring S can be as easily placed around the fore roll at one position as at another—at the top, side, or bottom; but when a two-roll spring is used, while the curve for the fore roll will fit that roll at any position along the side of the collar, the curve for the back roll will fit that roll properly only when used in approximately the same position—at the same cross-section of that roll; and it should be here noticed that the use of a curved elastic spring as a means of adjustably attaching a pad to a horse-collar is not so much that said spring can be adjusted to fit different-sized collars as that such a spring enables the pad to be attached to or disengaged from a collar with ease and in the quickest manner possible.

Fig. 4 shows how a pad with a single-roll spring is attached or disengaged. The outer end of the spring is placed against the fore roll at or near the seam at the side of that roll, and then that portion of the pad is so moved that the spring rotates about said end until it comes in position around the fore roll, and that without deflecting much the curvature of said spring. The pad is disengaged from the collar by reversing the latter operation. Now, were it desired to similarly put a two-roll spring on a collar, we would commence, as shown in Fig. 5, and rotate it into position, as shown in Fig. 6; but in order to put said spring on in that manner the roll-curves would have to be considerably deflected, as seen in Fig. 6, while the user would be as likely to attempt putting such a spring on the collar by bending both curves back as shown in Fig. 7, until they would go on the collar without rotating any whatever. It is therefore seen that the two-roll springs are much more cumbersome to use than single-roll springs, while when the curves of the two-roll springs are repeatedly and much bent they lose their elasticity, and consequently their usefulness.

Fig. 3 shows a horse-collar having attached to it a pad provided with single-roll springs, and shows also by means of the dotted lines the outline of a larger or longer collar similarly placed, and how such a collar-pad could be fitted to a larger collar. The methods of at-

taching the single-roll springs are, however, as seen in
433 Figs. 1 and 2, similar to those used for the two-roll springs in my previous patent.

I show in Figs. 1 and 2 a stiffening-piece, *p*, of leather or other suitable material, placed between the spring S and the surface material of the pad P. The spring may be attached by passing rivets *r r* through the spring and stiffening-piece and then sewing the stiffening-piece to the surface material of the pad, as shown in Fig. 2, or by passing the rivets *r r* through the spring, stiffening-piece, and the surface material of the pad, as shown in Fig. 1. Also, as in my previous patent, the rivets *r r* may be passed entirely through the pad, if desired, and hence secure the spring to both surface-pieces of the pad and make the latter more firm at the place of attachment; but a stiffening-piece may not be used at all, or one may be used, as shown in Figs. 1 and 2, or on the inside or outside of either surface-piece or of both surface-pieces, as found desirable and practicable. The pad to which such springs are applicable may be any sweat or cushion pad which separates the collar from all portions of a horse's neck and shoulders, and which is open at the withers or top, at the gullet or bottom, or both at top and bottom, or which is not open at all, and any such pads or portions of pads may have fore rolls, back rolls, both fore rolls and back rolls, or no rolls at all. These springs can also be used on pads which are placed beneath the collar at the withers, or wherever a collar-pad is used, for isolating a portion only of a collar from the horse's neck or shoulders. They can also be used for attaching pads to other portions of harness—as to breast-collars, &c.

Some horse-collars are made to open at the top and others at the bottom, and in being used they are sometimes opened on being removed from a horse's neck, and are again fastened on being replaced. Sometimes they are not opened at all, but are removed or replaced by being slipped over the horse's head.

It is common to make pads of the same kind to open at the top and others to open at the bottom, or not to open at all, to suit the kind of collar with which they are to be used or the habits of the user. As previously mentioned, my single-curved springs are equally well adapted to any such pads. A great feature possessed by pads having the single-curved springs is that they can be easily and speedily removed from or attached to a collar, and therefore can be separated from the collar when it is removed from a horse's neck; or the pad need not be disengaged from a collar at all, since the pad will remain attached by means of the springs to the collar when the latter is slipped over a horse's head; or, since a pad open at top can be used with a collar open at top, or a pad open at bottom with a collar open at bottom, and, further, since any such pad can be easily and speedily removed from or attached to a collar, it can be used with any style of collar, and therefore has general use.

As an article of manufacture the single-roll spring can be made and attached to a pad at much less expense than a two-roll spring. First, it does not require so much material; second, it is easier to form and may not require tempering, as the tempered steel in the

(No Model.)

434

J. SCHERLING.

PAD FASTENING FOR HORSE COLLARS.

No. 298,626. Patented May 13, 1884.

Fig. 1.

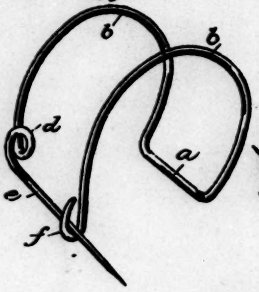

Fig. 2.

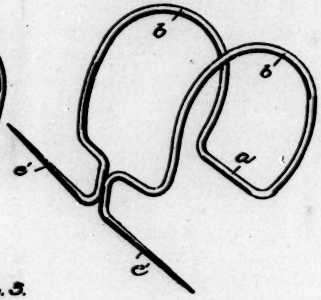

Fig. 3.

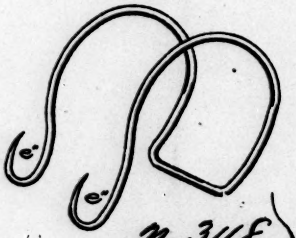

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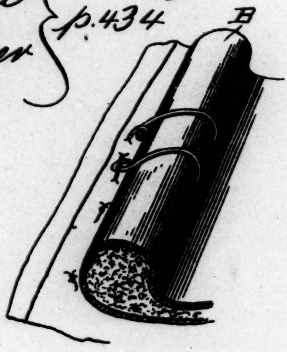
Fig. 4.

Fig. 5.



Attest:
F. L. Middleton
J. E. Middleton

Inventor:
John Scherling
by Joyce & Spear
Attys.

market may answer where it has been found that such steel will not do for a two-roll spring; third, it is more convenient to attach by riveting by hand or by machinery, for riveting machinery now in use can be used on a single-roll spring, but not on a two-roll one, since the curved ends of the latter project over the rivets.

It is to be understood that my springs are to be metallic or of any suitable elastic substance, and that the pads to which they are to be attached may be of any kind, material, or construction whatever to which it would be suitable and desirable to attach such springs, and that I am to use such arrangements as may be most suitable.

I claim—

1. As an attachment to a horse-collar pad or other harness-pad, and as a means of adjustably attaching a pad to a horse-collar or other part of harness, the elastic single-roll or single-curved spring S, constructed, arranged, attached, and operating substantially in the manner shown or described, and for or with the purposes set forth.

2. The combination, with a horse-collar pad, of elastic single-roll or single-curve spring S, substantially in the manner shown or described, and for the purposes set forth.

EDWARD L. McCLAIN.

Witnesses:

HAROLD A. DICKEY.
A. M. MACKERLY.

435 UNITED STATES PATENT OFFICE.

JOHN SCHERLING, of Dubuque, Iowa, assignor of one-half to L. D Randall & Co., of same place.

Pad-Fastening for Horse-Collars.

Specification forming part of Letters Patent No. 298,626, dated May 13, 1884; application filed March 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, John Scherling, of Dubuque, in the State of Iowa, have invented a new and useful improvement in fastening pads to horse-collars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to horse-collars; and it consists in the special construction of a combined wire safety pin and hook for fastening the pads to the collars, the same device being also useful for attaching pads to other parts of a harness.

In the accompanying drawings—

(Here follows diagram marked p. 434.)

Figure 1 shows a perspective view of the invention. Figs. 2 and 3 represent modifications. Fig. 4 is a perspective view of a part of

the collar with the fastening applied thereto. Fig. 5 is a similar view of the collar and pad with one of the fastenings in place.

Heretofore these pads have been held to the collar by means of clips of sheet metal riveted or permanently attached to the pad and adapted to clasp a collar.

The preferred form of the safety pin and hook is shown clearly in Fig. 1. It is made entirely of steel or other elastic wire, curved in the form of bows *b b*, connected by a continuous part at *a*. One of the bows *b* is continued to form a pin, *e*, which catches into a hook, *f*, on the end of the other bow *b*. To give proper elasticity to the pin, a loop, *d*, is formed at its junction with the end of the bow. The pin serves to connect the devices to the pad, being attached thereto by passing the pin through the pad or the covering of the pad in the ordinary manner, as shown in Figs. 4 and 5.

These fastening devices may be modified, as shown at e' e^2 of Figs. 2 and 3. All the forms shown are readily attachable and detachable, and may be shifted from one place to another on the collar. It is attached to the collar in the manner aforesaid, with the bows *b b* tightly clamping over the collar-rim B, as shown in Fig. 5.

The safety-pin may be very cheaply made, and is easily and conveniently applicable to the pad and collar, and at the same time is adjustable thereon.

I claim as my invention—

1. The described safety pin and hook, formed of wire, consisting of the bows *b b* and the part *a*, connecting the bows with suitable integral devices for attachment to the collars formed upon the ends of the bows, substantially as described.

2. In combination with the pad A and the collar B, a safety pin and hook, consisting of the bows *b b a*, formed of wires, the pins *e*, and the hook *f*, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN SCHERLING.

Witnesses:
F. W. ALTMAN.
ALEX. SIMPLOT.

436 COMPLAINANT'S EXHIBIT COMPLAINANT'S ASSIGNMENT No. 1.
B. Perin, Special Examiner and Notary Public.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of an instrument of writing executed by John Scherling June 24th, 1885, and recorded in Liber L 33, p. 28.

Said record has been carefully compared with the original and is a correct transcript thereof.

In testimony whereof I, R. B. Vance, acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed this

31st day of August, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

[SEAL.]

R. B. VANCE,
Acting Commissioner.

437 Liber L 33, p. 28.

John Scherling
to
Edward P. Robbins. } Assignment.

Whereas I, John Scherling, of Parkersburg, county of Butler, State of Iowa, did obtain letters patent of the United States for an improvement in pad fastenings for horse collars, which letters patent are numbered 298,626 and bear date the thirteenth (13th) day of May, in the year one thousand eight hundred and eighty-four; and whereas Edward P. Robbins, of Cincinnati, county of Hamilton, and State of Ohio, is desirous of acquiring an interest in the same: Now, therefore, to all whom it may concern, be it known that for and in consideration of the sum of two hundred and fifty dollar to me in hand paid, the receipt of which is hereby acknowledged, I, the said John Scherling, have sold, assigned, and transferred, and by these presents do sell, assign, and transfer, unto the said Edward P. Robbins the undivided one-half part of the whole right, title, and interest in and to the said invention and in and to the letters patent therefor aforesaid, the said undivided one-half part to be held and enjoyed by the said Edward P. Robbins for his own use and behoof and for the use and behoof of his legal representatives, to the full end of the term for which said letters patent are or may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

In testimony whereof I have hereunto set my hand and
438 affixed my seal at Parkersburg, in the county of Butler and State of Iowa, this 24th day of June, A. D. 1885.

JOHN SCHERLING. [SEAL.]

In presence of—
GEORGE GREY,
HENRY W. LADAGE,
Witnesses.

STATE OF OHIO, } ss:
Butler County, }

Before me, the undersigned, notary public in and for said county and State, this 24th day of June, 1885, personally appeared John Scherling and acknowledged the execution of the foregoing instrument and deed of assignment as his free act and deed.

Witness my hand and official seal.

[N. G. Baker, Notarial Seal, Parkersburg, Iowa.]

N. G. BAKER,
Notary Public.

Recorded July 27th, 1885.

439 COMPLAINANT'S EXHIBIT COMPLAINANT'S ASSIGNMENT No. 2.
B. Perin, Special Examiner and Notary Public.

DEPARMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of an instrument of writing executed by Edward P. Robbins July 1st, 1885, and recorded in Liber E 34, p. 474.

Said record has been carefully compared with the original and is a correct transcript thereof.

In testimony whereof I, R. B. Vance, acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 31st day of August, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

[SEAL.] R. B. VANCE,
Acting Commissioner.

440 Liber E 34, p. 474.

Whereas Edward P. Robbins, of Cincinnati, Ohio, is the owner of an undivided one-half interest in letters patent of the United States No. 298,626, granted John Scherling and L. D. Randall & Co. May 13th, 1884, for pad fastening for horse collars, assigned to him, said Robbins, on the 24th day of June, A. D. 1885, by said Scherling;

And whereas Edward L. McLain, of said Cincinnati, is desirous of purchasing said interest:

Now, therefore, the said Edward P. Robbins, in consideration of the premises and of one dollar in hand paid by the said McLain, does hereby give, grant, and assign all of his right, title, and interest in and to the said letters patent and the invention shown and described therein, together with the right to sue and collect damages or profits for any past infringements thereof, to said McLain.

Witness said Robbins' hand this 1st day of July, 1885.

EDWARD. P. ROBBINS.

Witness:
WM. STEMLER.

Recorded May 26, 1886.
A. C. W.
M. L. M.

441 COMPLAINANT'S EXHIBIT COMPLAINANT'S ASSIGNMENT No. 3.
B. Perin, Sp. Ex. and N. P.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records

of this office of an instrument of writing executed by L. D. Randall & Co. June 24th, 1885, and recorded in Liber L 33, p. 29.

Said record has been carefully compared with the original and is a correct transcript thereof.

In testimony whereof I, R. B. Vance, acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 31st day of August, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

[SEAL.]

R. B. VANCE,
Acting Commissioner.

442 Liber L 33, p. 29.

L. D. Randall & Co. to Edward L. McLain. } Assignment.

Whereas we, L. D. Randall & Co., of Dubuque, county of Dubuque, and State of Iowa, did obtain an undivided one-half interest, right, and title by an assignment, and by a grant in accordance therewith, in and to letters patent of the United States for an improvement in pad fastening for horse collars, which letters patent are numbered 298,626 and bear date the 13th day of May, in the year one thousand eight hundred eighty-four; and whereas Edward L. McLain, of Greenfield, county of Highland, and State of Ohio, is desirous of acquiring an interest in the same:

Now therefore, to all whom it may concern, be it known that for and in consideration of the sum of one hundred and fifty dollars ($150.00), to us in hand paid or placed to our credit, and other considerations, the receipt of said money being hereby acknowledged, we, the said L. D. Randall & Co., have sold, assigned, and transferred, and by these presents do sell, assign, and transfer, unto the said Edward L. McLain the said undivided one-half part of the whole right, title, and interest in and to the said invention and in and to the letters patent therefor aforesaid, the said undivided one-half part to be held and enjoyed by the said Edward L. McLain for his own use and behoof and for the use and behoof of his legal representatives, to the full end of the term for which said letters patent are or may be granted, as fully and entirely as the same would have been
443 enjoyed by us had this assignment and sale not been made.

In testimony whereof we have hereunto set our hands and affixed our seal, at Dubuque, county of Dubuque, and State of Iowa, this 24th day of June, 1885.

L. D. RANDALL & CO.

Witnesses:
W. C. WILSON.
GEO. F. MARTIN.

STATE OF IOWA, *County of Dubuque,* } ss:

Before me, the undersigned, a notary public for and in the county

and State above named, this 24th day of June, 1885, personally appeared John Thompson, of the firm of L. D. Randall & Co., and acknowledged the signing of the within instrument to be his free act and deed.

[C. H. Harris, Notarial Seal, Iowa.]

C. H. HARRIS,
Notary Public in and for Dubuque Co., Ia.

Recorded July 27th, 1885.
E. C. C.
M. L. M.

444 "COMPLAINANT'S EXHIBIT ORTMAYER FILE & CONTENTS."
Aaron E. Moore, Notary Public and Special Examiner.

(2–175.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file-wrapper and contents in the matter of the letters patent granted Andrew Ortmayer December 8th, 1885, number 331,813, for improvement in fastenings for sweat pads for horse collars.

In testimony whereof I, M. V. Montgomery, Commissioner of Patents, have caused the seal of the Patent Office to be [SEAL.] affixed this 14th day of April, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and tenth.

M. V. MONTGOMERY,
Commissioner.

445 $15 H. d'g.

Petition.

To the Commissioner of Patents:

Your petitioner, Andrew Ortmayer, a citizen of the United States of America, residing at Chicago, county of Cook, and State of Illinois, prays that letters patent be granted to him as sole inventor for the improvements in fastenings for sweat pads for horse collars set forth in the annexed specification.

And he hereby appoints F. F. Warner, No. 89 Madison street, Chicago, Ills., as his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and transact all business in the Patent Office connected therewith.

ANDREW ORTMAYER.

446 *Specification.*

To all whom it may concern:

Be it known that I, Andrew Ortmayer, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in fastenings for sweat pads for horse collars, of which the following, in connection with the accompanying drawing, is a specification:

In the drawing figure 1 is a side view or side elevation of a horse collar having a sweat pad connected thereto by means of my improved fasteners. Fig. 2 is a detail, the *the* same being a like representation, enlarged, of a portion of the collar and pad, and also showing one of the fasteners. Fig. 3 is a section in the plane of the line *x x* of Fig. 1, viewed in the direction indicated by the arrow there shown. Fig. 4 is a detail in perspective, the same showing one of the fasteners upon a still larger scale and representing its relation to the pad. Fig. 5 is a like view, showing a modification of construction.

Oct. 30, '85.

Insert I, Like letters of reference indicate like parts.

Oct. 30, '85. This invention relates to means employed for the purpose of connecting sweat pads detachably to horse collars, and it consists of certain novel features of construction and arrangement which will be hereinafter described and set forth in my claims.

I am aware that various devices have heretofore been employed for the same purpose, and I do not, therefore, here intend to claim broadly a fastening of this class, my object being to overcome some of the objectionable features which have heretofore existed.

A represents a horse collar, and B B are the hames. C is a sweat pad. All of these parts may be made and arranged together
447 as has been heretofore common, my invention not relating particularly thereto, but to the means employed for connecting the sweat pad to the collar, which means I will now proceed to describe. D is a hook made of wire, its curved or hooked portion being so bent or formed as to clasp the outer or exposed part of the front roll of the collar and so as to have a broad bearing thereon, as is clearly indicated in Figs. 2 and 4. The ends of the wire of which the hook is made are bent laterally, as indicated at *a a*, and these lateral extensions serve as journals or pintles for the said hook. E is a piece of leather folded upon itself and riveted to the pad C at or near its front edge or roll, *a' a'* representing the rivets. Any suitable means, however, may be employed for fastening the leather E firmly to the pad. Before folding the leather E upon itself and fastening it to the pad I arrange the journals or pintles *a a* in the fold as is clearly indicated in Figs. 4 and 5, thus connecting the hook D to the pad in such manner that it will be jointed or hinged thereto so as to be capable of being turned in the fold of the leather E. In Fig. 5 I have shown one part of the leather E as extending along the under side of the hook, as shown at *b*, and to retain it approximately in the form of the hook I slit the said part *b* trans-

versely, thereby forming a loop, *b'*, which passes over the said hook. This extending part may be termed a lining or safe piece. To apply the pad to the collar it is only necessary to arrange it underneath the collar in the usual manner, first raising the hooks D D and then pushing them downward so that they will clasp the front roll of the collar, as is clearly indicated in Figs. 2 and 3. The hook, when made of wire bent in the form shown and described, may be constructed with facility, and is also very simple in its operation,
448 and is cheap and durable as well as practical for the purpose for which it is intended. The collar and pad may also be connected and disconnected easily. I desire to state that this construction and manner of applying the hook renders it unnecessary to make it of flexible material. I desire to state, also, that any suitable material may be employed as an equivalent for the leather piece E.

It will be perceived from the foregoing description and from reference to the drawing that it will be impossible for the horse's shoulders to come in contact with any unevenness or lumps or bunches produced by the rivets or fastening employed for connecting the hooks to the pads, and consequently that galls or sores will not be produced thereby. The lining *b* prevents the hook from coming in contact with the collar and keeps the collar from being cut or injured by the hook.

I desire further to state, as a feature of my invention, I apply a loop, F, to the upper part of the pad to aid in securing the pad firmly and properly but detachably to the collar.

It is common to provide horse collars at their upper ends with a safe piece, G, one end of which is left free or loose. This safe piece I slip through the loop F, or the said loop may instead be slipped around or encircle the upper end of the collar, as may be deemed best.

In either case the pad and collar, as will be perceived, will be more securely connected than if dependence should be placed only upon the hooks D D.

Having thus described my invention, what I claim as new, and desire to secure by letters patent, is—

1. A sweat pad provided with hooks made of wire and hinged to the said pad, the said hooks being made and arranged for clasping the front roll of the collar, substantially as and for the purposes specified.

2. A horse-collar sweat pad provided with
449 Substitute 2. hooks made of wire bent to clasp the roll of
Oct. 30, '85. the collar, and also having laterally extending ends clasped to the pad, substantially as and for the purposes specified.

3. The combination of the pad C, the hook D, made of wire bent or curved, as shown, for clasping the front roll of a horse collar,

. Words and sentences enclosed between rules erased in copy.

and having laterally extending ends *a a* and the leather E, or other equivalent, folded upon itself and over the said extensions and attached to the pad C, substantially as and for the purposes specified.

4. The combination, with a horse-collar sweat pad provided with hooks for connecting it detachably to the collar, of the lining *b*, arranged underneath the said hooks, substantially as and for the purposes specified.

5. In a combination, a horse collar having thereon a safe piece, and a sweat pad having thereon hooks for clasping the front roll of the collar, and a loop applied to the upper part of the pad, substantially as and for the purposes specified.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

ANDREW ORTMAYER.

Witnesses:

ADDIE HUSZAGH.
GEO. W. UNDERWOOD.

450 *Oath.*

STATE OF ILLINOIS, } ss:
County of Cook, }

Andrew Ortmayer, the above-named petitioner, being duly sworn, says that he resides at Chicago, in Cook Co. and State of Illinois; that he verily believes himself to be the original and first and sole inventor of the improvements in fastenings for sweat pads for horse collars described and claimed in the accompanying specification, and that he does not know and does not believe that the same was ever known or used; that he is a citizen of the United States, and that the said invention has not been patented to him or to others with his knowledge or consent in any country, and that the same has not to his knowledge been in public use or on sale in the United States of America for more than two years prior to the filing of this application.

ANDREW ORTMAYER.

Subscribed and sworn before me this 18th day of July, 1885.

[SEAL.] GEO. W. UNDERWOOD,
Notary Public.

Endorsed: Serial No. 173,034. Paper No. 1–2. Application filed July 30, 1885. (United States Patent Office, July 30, 1885.)

Words and sentences enclosed between rules erased in copy.

451 Room 95.

{ U. S. Patent Office, Mailed Aug. 27, 1885. }

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Aug. 26th*, 1885.

No. 173,034. Sweat-pad fastener. Filed July 30th, '85.

Andrew Ortmayer, care F. F. Warner, No. 89 Madison St., Chicago, Ills.:

The 1st and 2nd claims are rejected in view of Scherling No. 298,626, May 13th, '84, horse collars.

The means for attaching the hook are old, in common use with many varieties of hinged articles; the hook, therefore, being met by the reference, a patentable difference is not found to exist in combining therewith a well-known means of fastening the same. The 3rd claim is therefore refused.

It is also common to provide linings of leather to prevent friction or abrasion. This, therefore, constitutes no patentable difference in view of the reference, and the 4th claim is refused.

The "loop" referred to in the 5th claim is not clearly shown, and action on this claim is therefore withheld until a more full description of the same is given. The state of the art is further illustrated in Rice No. 318,505 and McClain 313,606, horse collars.

EDWARD O. FORNEY, *Ass't Ex'r.*

JOHN D. HYER, *Act'g Ex'r.*

Endorsed: Serial No. 173,034. Paper No. 1. Rejection. Dated Aug. 25, 1885.

452 To the Hon. Com'r of Patents.

SIR: In the matter of my application, No. 173,034, for an improvement in fastenings for sweat pads for horse collars, filed July 30, 1885, I hereby amend my specification by erasing the word "and," next before "Fig. 5," line 8, page 2, and by placing a semicolon instead of a comma next before the word so erased.

Also by placing a semicolon next before the word "construction," line 9, page 2, and by inserting next after the said word "construction" the following, to wit:

> "Fig. 6 is a top view of the upper part or end of a horse collar and pad provided with my improvements, and Fig. 7 is a section in the plane of the line *x x* of Fig. 6, viewed in the direction indicated by the arrow there shown."

Also by erasing my claims and by inserting instead thereof the following, to wit:

> "1. The combination of a sweat pad for horse collars, the hook D, made of wire and bent or curved as shown for clasping the front roll of a horse collar and being bent near its

ends for forming the laterally extending arms *a a*, projecting in opposite directions from the sides of the said hook, respectively, and the leather E, or its equivalent, folded upon itself and over the said extension and attached to the said pad, substantially as and for the purposes specified.

"2. The combination of the pad C, the hook D, made of wire bent or curved as shown for clasping the front roll of a horse collar and having laterally extending arms *a a*, projecting in opposite directions, and the leather E, or other equivalent, folded upon itself and over the said extension and attached
453 to the said pad, and also extending along underneath the said hook, and having a loop, *b'*, for connecting the said extension or tongue to the said hook, substantially as and for the purposes specified.

"3. In combination, a horse collar having thereon a safe piece, G, and a sweat pad having thereon hooks for clasping the front roll of the collar, and also having a loop, F, applied to the upper part of the pad, the said loop being adapted and arranged to permit the passage through it of the said safe piece, substantially as and for the purposes specified."

Chicago, Oct. 26, '85.

ANDREW ORTMAYER,
By F. F. WARNER, *His Att'y.*

NOTE.—The examiner, in official letter of Aug. 26, 1885, holds that the 1st and 2nd claim should be rejected in view of patent to Scherling, No. 298,626, May 13, 1884, horse collar.

In the patent cited we find a hook adapted to be attached to a horse-collar pad, and also bent to clasp the roll of a horse collar, but this hook in some of its features of construction is quite different from the hook shown by applicant; for example, Scherling's hook is made all in one piece of metal, and one of its ends is bent and formed to perform the function of a safety-pin and the other end of the wire is made hook-shaped to receive this pin. The applicant also makes his hook of wire and bends it to clasp the roll of the horse collar, but at each end of the wire he bends or makes a lateral arm, *a*, this arm extending in opposite directions from the side of the hook, respectively.

The applicant's hook, it is true, is not made in sections, but another part or piece, made of flexible material, is bent to
454 receive the arms *a a* and clasp them to the pad, when the said flexible part is stitched or otherwise fastened thereto.

It would seem, therefore, that the applicant's construction of the hook, independently of the means employed for connecting it to the collar, is not met in the patent cited, and hence that a claim limited to this difference in construction should pass. This limitation we have made by the amendment herewith presented, and trust, therefore, that the reference to Scherling may be withdrawn.

The examiner further says that "the means for attaching the

Vide Fig. 2, Scherling pat., Nov. 3.

hook are old and in common use with many variations of hinged articles. The hook, therefore, being met by the reference, a patentable difference is not found to exist in combining therewith a well-known means of fastening the same. The 3rd claim is therefore refused."

Now, if the hook as at present claimed is not old the examiner's reason for the rejection of the 3rd original claim fails, even if it would stand in view of recent decisions affirming what has long been well established, namely, that it is legitimate to claim a new combination consisting of old parts.

The examiner was also in error, we think, in view of the decision in *Ex parte* A. B. Smith, C. D., 1872, page 82, in which it is held that a legitimate combination should not be dissected in order that a claim may be rejected piece-meal; besides this we only have the examiner's statement that it is old or common to hinge articles in the manner shown by the applicant.

While we do not now dispute the accuracy of the examiner's statement, we simply refer to it for the purpose of reminding him that, instead of presenting the amendment herewith sub-
455 mitted, we might have called upon him for a specific reference. Such a reference, however, will now be unnecessary in view of the amendment referred to.

We have also noted what the examiner says in regard to providing linings of leather to prevent friction. Whatever force this remark might have as to the original 4th claim, it would seem to have no bearing upon the present 2nd claim, which has been substituted for the original 4th claim.

The applicant has now furnished a drawing plainly showing the "loop" referred to in the original 5th claim, and this drawing, in connection with the description contained in the specification referring to the said loop, clearly indicates the mode of making and applying and the purpose or function of the said loop.

The examiner also refers, for the purpose of showing the art further, to the patent to Rice, No. 318,505, and the patent to McLain, No. 313,606, horse collars. In the first of these patents the hook consists of two metallic sections, neither of which has the laterally extending arms *a a*, and in the patent to McLain the hook shown is provided with a safety-pin similar to that in the patent to Scherling. The hook in the patent to McLain is made in three sections, all differently constructed from the single wire section shown by the applicant.

We trust that, for the foregoing reasons, the application may be favorably acted upon in view of the amendment now presented.

Chicago, Oct. 26, 1885.

Respectfully submitted,

ANDREW ORTMAYER,
By F. F. WARNER, *His Att'y.*

(Endorsed:) Serial No. 173,034. Paper No. 2. Amendment 1-2. Argument. Filed Oct. 30, 1885. (U. S. Patent Office, Oct. 30, 1885.)

456 U. S. PATENT OFFICE,
WASHINGTON, D. C., *Nov. 5th*, 1885.

Andrew Ortmayer, care of F. F. Warner, Chicago, Ills.

SIR: Your application for a patent for an improvement in fastenings for sweat pads to horse collars, filed July 30th, 1885, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897 Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run; but to do this properly applicants will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, lithographing, and engrossing of the several patent parts preparatory to final signing and sealing will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor and title of invention as above given, date of allowance—which is the date of this circular—date of filing, and, if assigned, the name of the assignees.

If you desire to have the patent issued to assignees, an assignment, containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

457 Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully, M. V. MONTGOMERY,
Commissioner of Patents.

[Written across the face in red ink:] ☞ In remitting the final fee give the serial number at the head of this notice.]

[Written on margin in red ink:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same satisfactory reasons must be given therefor on or before the payment of the final fee.]

458 $20.

Memorandum of Fee Paid at U. S. Patent Office.

Serial No. 173,034. 1885.

Inventor, Andrew Ortmayer.

Patent to be issued to him.

Name of invention as allowed, horse-collar pads.

Date of payment, Nov., 1885.

Fee, $20.00.

Solicitor, F. F. Warner.

Date of filing, July 30th, 1885.

Date of circular of allowance, Nov. 5th, 1885.

Send patent to E. F. Warner, 89 Madison St., Chicago, Ills.

(Endorsed:) U. S. Patent Office, Nov. 16, 1885.

459 Chapman.

Serial No. 173,034.
1885.
Patent No. 331,813.

Ex'r Book No. $\frac{143}{145}$.

Andrew Ortmayer,
Of Chicago,
County of Cook,
State of Illinois.
Invention, fastenings for sweat pads for horse collars.

Parts of application filed.
- Petition, July 30, 1885.
- Affidavit, " " "
- Specification, " " "
- Drawing, " " "
- Model, not required.
- Specimen, ——.
- First fee, cash, $15, July 30, 1885.
- " " cert., ——.

App. filed complete, July 30, '85.
Examined Oct. 30, '85. Chapman, ex'r.
Countersigned Nov. 5, '85. J. W. Babson, for Commissioner.
Notice of allowance, Nov. 5, 1885.
Final fee, cash, $20, Nov. 16, 1885.
" " cert., ——, 188–.
Patented Dec. 8, 1885.
Att'y or P. O. address, F. F. Warner, 89 Madison St., Chicago, Ills.

(No Model.) 2 Sheets—Sheet 1.

A. ORTMAYER.

FASTENING FOR SWEAT PADS FOR HORSE COLLARS.

No. 331,813. Patented Dec. 8, 1885.

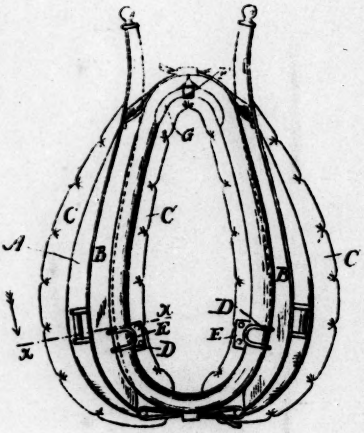


Fig. 1.

Fig. 2.

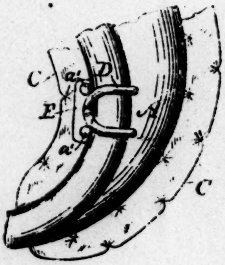
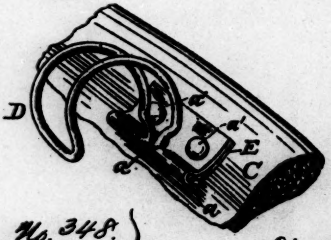


Fig. 3.

Fig. 4.



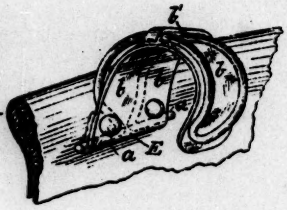


Fig. 5.

No. 348.
McClain
v.
Ortmayer
et al.
p. 461

Witnesses
Sam'l S. Dover.
J. B. Halpenny

Inventor.
Andrew Ortmayer
By F. F. Warner.
his atty.

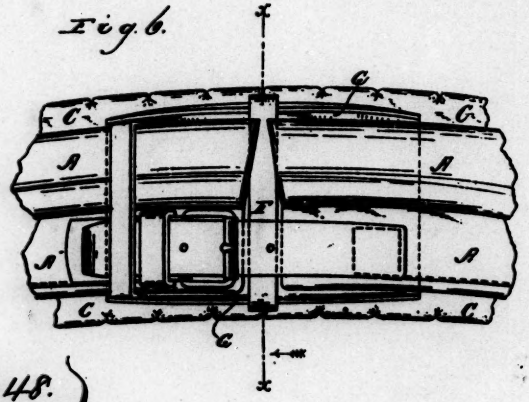
(No Model.) 2 Sheets—Sheet 2.

A. ORTMAYER.

FASTENING FOR SWEAT PADS FOR HORSE COLLARS.

No. 331,813. Patented Dec. 8, 1885.

Fig. 6.



No. 348.
McClain
vs
Ortmayer
et al.
p. 462

Fig. 7.

Witnesses.

Henry Frankfurter.
Adolir Hanagh

Inventor.
Andrew Ortmayer
per. F. F. Warner
his Attorney.

460 1885.

Contents. F.

1–2. Application, 1 paper.
1. Rejection Aug. 25, '85.
2. Amend't 1–2 & arg'm't, Oct. 30, '85.
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Title: Improvement in fastenings for sweat pads for horse collars.
54, harness.
Ex'd: M. McK.; L. E. M.

(Endorsed:) 7480. D., '86.

463 UNITED STATES PATENT OFFICE.

ANDREW ORTMAYER, of Chicago, Illinois.

Fastening for Sweat-Pads for Horse-Collars.

Specification forming part of Letters Patent No. 331,813, dated December 8, 1885; application filed July 30, 1885. Serial No. 173,034. (No model.)

To all whom it may concern:

Be it known that I, Andrew Ortmayer, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in fastenings for sweat-pads for horse-collars, of which the following; in connection with the accompanying drawings, is a specification.

(Here follow diagrams marked pp. 461 & 462.)

In the drawings, Figure 1 is a side view or side elevation of a horse-collar having a sweat-pad connected thereto by means of my improved fasteners. Fig. 2 is a detail, the same being a like representation, enlarged, of a portion of the collar and pad, and also showing one of the fasteners. Fig. 3 is a section in the plane of the line *x x* of Fig. 1, viewed in the direction indicated by the arrow there shown. Fig. 4 is a detail in perspective, the same showing one of the fasteners upon a still larger scale, and representing its relation to the pad. Fig. 5 is a like view showing a modification of construction. Fig. 6 is a top view of the upper part or end of a horse-collar and pad provided with my improvements; and Fig. 7 is a section in the plane of the line *x x* of Fig. 6, viewed in the direction indicated by the arrow there shown.

Like letters of reference indicate like parts.

This invention relates to means employed for the purpose of connecting sweat-pads detachably to horse-collars; and it consists of certain novel features of construction and arrangement, which will be hereinafter described, and set forth in my claims.

I am aware that various devices have heretofore been employed for the same purpose, and I do not, therefore, here intend to claim, broadly, a fastening of this class, my object being to overcome some of the objectionable features which have heretofore existed.

A represents a horse-collar, and B B are the hames. C is a sweat-pad. All of these parts may be made and arranged together, as has been heretofore common, my invention not relating particularly thereto, but to the means employed for connecting the sweat-pad to the collar, which means I will now proceed to describe.

D is a hook made of wire, its curved or hooked portion being so bent or formed as to clasp the outer or exposed part of the front roll of the collar, and so as to have a broad bearing thereon, as is clearly indicated in Figs. 2 and 4. The ends of the wire of which the hook is made are bent laterally, as indicated at *a a*, and these lateral extensions serve as journals or pintles for the said hook.

E is a piece of leather folded upon itself, and riveted to the pad C at or near its front edge or roll, *a' a'* representing the rivets. Any suitable means, however, may be employed for fastening the leather E firmly to the pad. Before folding the leather E upon itself and fastening it to the pad I arrange the journals or pintles *a a* in the fold, as is clearly indicated in Figs. 4 and 5, thus connecting the hook D to the pad in such a manner that it will be jointed or hinged thereto so as to be capable of being turned in the fold of the leather E.

In Fig. 5 I have shown one part of the leather E as extending along the under side of the hook, as shown at *b*, and to retain it approximately in the form of the hook I slit the said part *b* transversely, thereby forming a loop, *b'*, which passes over the said hook. This extending part may be termed a lining or safe piece.

To apply the pad to the collar it is only necessary to arrange it underneath the collar in the usual manner, first raising the hooks D D and then pushing them downward, so that they will clasp the front roll of the collar, as is clearly indicated in Figs. 2 and 3.

The hook, when made of wire bent in the form shown and described, may be constructed with facility, and is also very simple in its operation, and is cheap and durable, as well as practical for the purpose for which it is intended. The collar and pad may also be connected and disconnected easily. I desire to state that this construction and manner of applying the hook renders it unnecessary to make it of flexible material. I desire to state, also, that any suitable material may be employed as an equivalent for the leather piece E.

It will be perceived from the foregoing description and from reference to the drawings that it will be impossible for the horse's shoulders to come in contact with any unevenness or lumps, or bunches produced by the rivets or fastening employed for connecting the hooks to the pads, and consequently that galls or
464 sores will not be produced thereby. The lining *b* prevents the hook from coming in contact with the collar, and keeps the collar from being cut or injured by the hook.

I desire further to state that, as a feature of my invention, I apply a loop, F, to the upper part of the pad, to aid in securing the pad firmly and properly but detachably to the collar.

It is common to provide horse-collars at their upper ends with a safe-piece, G, one end of which is left free or loose. This safe-piece I slip through the loop F, or the said loop may instead be slipped around or encircle the upper end of the collar, as may be deemed best. In either case the pad and collar, as will be perceived, will be more securely connected than if dependence should be placed only upon the hooks D D.

Having thus described my invention, what I claim as new, and desire to secure by letters patent, is—

1. The combinatian of a sweat-pad for horse-collars, the hook D, made of wire and bent or curved, as shown, for clasping the front roll of a horse-collar, and being bent near its ends for forming the laterally-extending arms *a a*, projecting in opposite directions from the sides of the said hook, respectively, and the leather E, or its equivalent, folded upon itself and over the said extensions, and attached to the said pad, substantially as and for the purposes specified.

2. The combination of the pad C, the hook D, made of wire, bent or curved, as shown, for clasping the front roll of a horse-collar, and having laterally-extending arms *a a*, projecting in opposite directions, and the leather E, or other equivalent, folded upon itself and over the said extensions and attached to the said pad, and also extending along underneath the said hook, and having a loop, *b'*, for connecting the said extension or tongue to the said hook, substantially as and for the purposes specified.

3. In combination, a horse-collar having thereon a safe-piece, G, and a sweat-pad having thereon hooks for clasping the front roll of the collar, and also having a loop, F, applied to the upper part of the pad, the said loop being adapted and arranged to permit the passage through it of the said safe-piece, substantially as and for the purposes specified.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

ANDREW ORTMAYER.

Witnesses:
ADDIE HUSZAGH.
GEO. W. UNDERWOOD.

466 UNITED STATES PATENT OFFICE.

AGATHA MONTLEART, of Mildmay Park, and WM. TENT, of Birchin Lane, County of Middlesex, London, England.

Improved Means for Attaching Hooks to Furniture.

Specification forming part of Letters Patent No. 41528, dated February 9, 1864.

To all whom it may concern:

Be it known that we, Agatha Montleart, of Mildmay Park, in the county of Middlesex, widow, and William Tent, of Birchin Lane, in the city of London, glover and hosier, subjects of Her Britannic Majesty, have invented an improved mode of attaching hooks to furniture or fabrics for suspending dresses or parts of dresses, fabrics, curtains, and other articles of upholstery or apparel; and we do hereby declare that the following is a full and exact description of our said invention.

This invention relates to the production of a fastening suitable for attaching curtains to their rods without the aid of sewing, and also for the suspending of dresses and other articles or fabrics.

The fastening consists of a metal hook or eye combined with a brooch-fastening and spring-pin, which are formed into one instrument.

The invention admits of many modifications of construction without its efficacy being impaired. It may also be used beneficially with either end uppermost, according to the use to which for the time it may be applied.

In the accompanying drawings—

(Here follows diagram marked p. 465.)

Figure 1 shows the fastening constructed of one piece of metal, brass or iron wire being used for the purpose. The wire is first bent to form the hook *a*. It is then curled over vertically and back to a horizontal direction to form a rest or catch, *b*, (for the spring-pin *c'*,) and it is then carried down to a suitable distance, thereby forming a stem, and is curled round to insure elasticity for the spring-pin *c*, which is produced by continuing the wire upward to the rest or catch *b* and pointing it at its extremity. In order to hold a curtain by means of this construction of fastening, the pins *c* of any given number of these fastenings are passed through the fabric in a vertical direction at or near its edge, and the hooks *a* are inserted in the loops of the curtain-rod ring; or, if the rods are of small diame-

A. Montleart & W. Tent.

Attaching Hooks to Furniture.

No. 41528. Patented Feb. 9. 1864

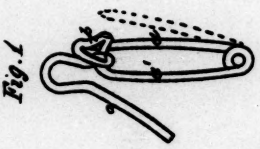
Fig. 1

Fig. 8.

Fig. 7.

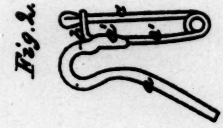
Fig. 2.

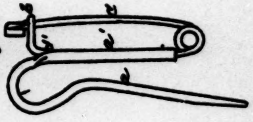
Fig. 4

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Ortmayer
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} p. 465

Fig. 3.

Fig. 6.

Fig 9

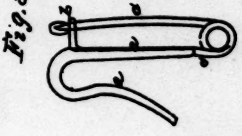


Fig. 5.

Witnesses.

D. W. Coombs
Chas. Reed

Fig 10.

Inventor
A. Montleart
W. Tent
Jon Munn & Co
Attorneys

ter, the hooks may be hung upon the rods themselves. By reversing the fastening and inserting the pin in any fixed fabric the hook will project and be ready to receive any light articles which may be suspended therefrom. When fastenings of greater strength are required, we prefer to make them in two parts in order that the hook which will bear the greater portion of the strain may be made of stouter wire than the spring-pin.

Fig. 2 shows a fastening constructed on this principle, the hook *a* being made of stouter wire than the parts *b* and *c* forming the brooch-fastening.

Fig. 3 represents different views of the hook part of the article detached from the spring-fastening.

Fig. 4 represents a modification of Fig. 2, the principal difference being that the hook *a* is made larger and stronger, and has a shank, *a'*, which firmly clasps the stem of the fastening throughout its whole length.

In order to couple the parts *a* and *c* together, in Figs. 2 and 4, the part *a'* is made with a spread or flat end, as shown in the front view, Fig. 3, and this spread part is then hollowed by turning up the edges, as shown in the plan and side views at Fig. 3, so as to receive the stem *c'* of the fastening.

Fig. 5 represents another modification, in which the hook *a*, shown detached at Fig. 6, is soldered onto the side of the stem of the fastening. In Figs. 2, 4, and 5 a kind of brooch-fastening, *b*, is made to receive the point of the pin *c*.

Another method of making this fastening is shown at Figs. 7 and 8, where two hooks, *a* and *a'*, are employed, one hook being curved upward and the other downward, both hooks being vertical, but at right angles to each other in plan.

Fig. 9 is another form of fastening, in which the spring-pin *c* is intended to be inserted transversely in the fabric, and the hook *a* being fastened on at right angles to the spring-pin *c*.

Fig. 10 is a modification of the above, the only difference being that instead of a hook, *a*, as in Fig. 9, there is a ring or eye, *d*, secured in a similar manner to the spring-fastening, so that a hook can be suspended therefrom.

Having now described our invention of an improved mode of attaching hooks to furniture or fabrics for suspending dresses
467 or parts of dresses, fabrics, curtains, and other articles of upholstery or apparel, and having explained the manner in carrying the same into effect, we claim as our invention—

The combination of a hook, *a*, or eye *d* with the spring-fastening *b c c'*, as and for the purpose herein set forth.

In witness whereof we, the said Agatha Montleart and William Tent, have hereunto set our hands and seals this 27th day of November, in the year of our Lord 1863.

AGATHA MONTLEART. [L. S.]
W. TENT. [L. S.]

Witnesses:
G. W. WESTLEY,
W. WYNN,
Both of 24 Royal Exchange, London.

469 UNITED STATES PATENT OFFICE.

WILLIAM R. PHELPS, of New York, N. Y.

Improved Head-Rest for Railroad-Car Seats.

Specification forming part of Letters Patent No. 48586, dated July 4, 1865.

To all whom it may concern:

Be it known that I, William R. Phelps, of the city, county, and State of New York, have invented a new and useful improvement in head-rests for car-seats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

(Here follows diagram marked p. 468.)

Figure 1 is a view showing the rest attached to a seat; Fig. 2, a view of the rear side of the rest when detached therefrom.

Similar letters of reference indicate like parts.

In the frequent or occasional traveling from place to place, and especially long distances, by railroad-cars it is often quite a relief and comfort to recline the head against some suitable rest adapted for the purpose, and the want of such a device has long been felt, and more especially one which could be easily attached to or detached from the seat at pleasure, and at the same time admit of being readily carried in a traveling-bag or about the person while so traveling.

The many advantages of such a head-rest are so manifest to all as to need no particular mention herein, and therefore the present invention has for its object the production of a head-rest to be used while traveling which would embrace the features above stated, and is accomplished by attaching a suitable shaped resting-piece or cushion for the head, made of any desired materials and of a form best adapted to the comfort and ease of the person, to and firmly fastening the same thereon a light but sufficiently strong frame, made of steel or any other suitable material, which frame is attached to another frame made of similar metal or material in such a manner as to be easily moved within and upon the same, so as to be adjusted at pleasure to any desired position with regard thereto, the latter frame being so arranged or constructed as to be easily attached to or detached from the car-seat when desired.

Thus it is apparent from the above that by the general manner in which the head-rest is constructed and arranged it is susceptible of easy adjustment to suit the many variations in the height of persons, as well as also portable.

a a represent a cushion or resting-surface for the head, made of any desired materials adapted for such a purpose, which cushion is

W. R. Phelps,

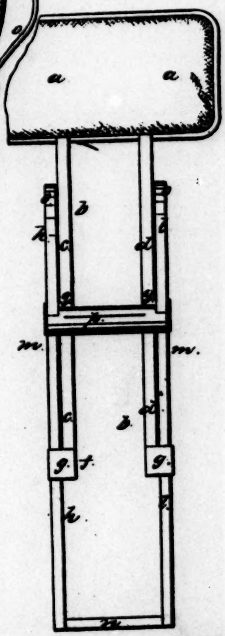
Head Rest,

Patented July 4, 1865.

No. 48,586.

Fig: 1.

Fig: 2



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v.
Ortmayer
Etal.

p. 468

Witnesses:
M. A. Thourne Jr.
J. M. Covington

Inventor
W. R. Phelps
By Munn & Co.
Attys

attached in any proper manner by screws, rivets, or other similar devices to one end of a short frame, *b b*, made of steel or other light, flexible, and sufficiently strong material. The frame *b b* consists of two parallel bars or rods, *c* and *d*, on the end *f* of each of which is secured by rivets a clasp or band, *g*, passing loosely over and around one of two other parallel bars of metal or other suitable material, *h* and *l*, with edge to edge, of another frame, *m*, having at one end a flat cross-bar, *n*. The other end, *o*, is bent over in the shape represented in Fig. 1, and has a cross roller or bar, *p*, attached thereto in any proper manner. Upon each of the two bars *h* and *l* of the frame *m*, and fastened thereto by rivets or by any other suitable means, is another clasp, *q q*, passing loosely around the bars *c* and *d* of the rest-frame *b*, and in which clasps, and upon the rods *h* and *l* of frame *m*, the frame to which the head-rest is attached moves, and is guided thereby and kept in proper position.

When the head-rest is to be used its frame *m* is put over the top edge of the car-seat and moved down upon its back cushion, the upper or bent end thereof being sprung over and upon the same, coming to a bearing by its cross-bar against the rear side of the back, where it is securely held by the strength of the spring given to the frame in bending it over, as described. The head-rest frame is then moved along upon the frame thus fixed, as it were, to the seat, as described, and raised to any height, according to the desire of the person who is to use it, and the cushion thereof brought to the proper position for the reclining of the head against the same, as seen in Fig. 1.

There are various forms and sizes in which my head-rest may be made other than that herein described and represented in the drawings, as well as also different modes of attaching the head-rest or the adjustable frame to the fixed frame, and therefore I do not intend to limit myself to any particular form, size, material, or mode of connecting the two frames together.

It will be seen from the above description that not only does my improved head-rest embrace all desired, so far as regards port-
470 ability, but that also from its peculiar construction and arrangement an easy, light, and elastic rest is provided for the head, the great advantage of which is apparent; and, furthermore, that, although I have described it as particularly applied to car-seats, it can be readily adapted to any chair or other article of furniture used by persons when sitting or reclining.

I claim—

The improved head-rest herein described, to be attached to car-seats, &c., the same consisting of a movable and adjustable head-rest frame, in combination with a frame susceptible of being attached to or removed from the seat at pleasure, arranged and operating together substantially as specified.

WILLIAM R. PHELPS.

Witnesses:
ALBERT W. BROWN.
M. M. LIVINGSTON.

472 UNITED STATES PATENT OFFICE.

H. E. CHURCHILL, of Portland, Maine.

Letters Patent No. 87543, dated March 9, 1869.

Improved Portable Head-Rest.

The schedule referred to in these letters patent and making part of the same.

To all whom it may concern:

Be it known that I, H. E. Churchill, of the city of Portland, county of Cumberland, and State of Maine, have invented a new and useful portable head-rest, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making a part of this specification, in which—

(Here follows diagram marked p. 471.)

Figure 1 represents a front perspective view of my invention attached to the back of a car-seat.

Figure 2 represents a perspective view of the back of same.

Similar letters indicate like parts.

My invention contemplates a rest or support for the head, particularly adapted to the back of car-seats, or other upholstered seats, which may be readily attached to and removed from same.

It consists of a curved back, *a*, Figs. 1, 2, of wood, or other suitable material, near the lower edge of which are fastened curved arms, *b b'*, Fig. 2, *b'*, Fig. 1, terminating in the forks *c c' c'' c'''*, Fig. 2, *c'' c'''*, Fig. 1, *c c'* being somewhat longer than *c'' c'''*.

These arms are preferably made of metal, since it is necessary that the forks should have some "spring," so that when pressed down on the seat, as shown in Fig. 1, they may grasp the same firmly by sinking into the upholstery.

It is evident that when placed in this position, the forks *c c' c'' c'''* will hold the rester firmly against the pressure of the head on the front, *d*, Fig. 1, which will be upholstered.

I design using this specially on car or other seats which are upholstered, since on such the grasp of the forks will be most certain; but by lengthening them somewhat, and making their spread less, it may be used on other seats as well.

In order to make the rester more convenient for travelling, I attach the arms *b b'* to the back by pivots, so that they may be folded up when not in use.

The advantages of this device are manifest to any one who has occasion to travel in the cars, since by it a comfortable seat may at all times be made of the ordinary car-seat, by simply attaching this, as shown.

I do not, of course, claim to be the first inventor of a portable

H. E. Churchill,

Head Rest.

No. 87,543. Patented Mar. 9. 1869.

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Fig. 1.

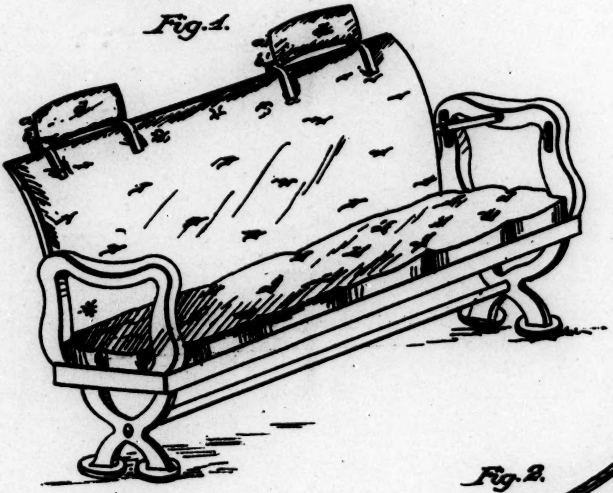
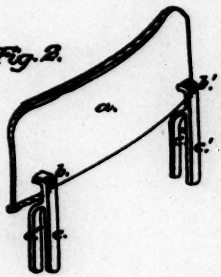


Fig. 2.



Witnesses:
C. K. Pickles
D. H. Nation

Inventor:
H. E. Churchill
Saml. S. Floyd
Attorney

J. L. Moore.
Pencil Holder.
No. 88,060. Patented Mar. 23, 1869.

No. 348.
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v.
Ortmayer
et al.
p. 473

Witnesses.
Wm A Morgan
Ch. C Dietrich

Inventor
Jas. L Moore
per Munn & Co
Attorneys

head-rest, or any novelty in applying such to car-seats generally; but

What I do claim as my invention, and desire to secure by letters patent, is—

The combination of the back, *a*, pivoted arms *b b'*, with their forks *c c' c'' c'''*, so as to form a portable head-rest, constructed and operated substantially as and for the purpose shown and specified.

H. E. CHURCHILL.

Witnesses:
CHRISTIANSON HESSE.
MARY B. SUMNER.

474 UNITED STATES PATENT OFFICE.

JAMES L. MOORE, of Bridgeport, Connecticut.

Letters Patent No. 88060, dated March 23, 1869.

Improvement in Pencil-Holders.

The schedule referred to in these letters patent and making part of the same.

To all whom it may concern:

Be it known that I, James L. Moore, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and improved pencil-holder; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

(Here follows diagram marked p. 473.)

This invention relates to a new and improved pencil-holder, to be attached to the coat or vest, for the purpose of receiving and holding an ordinary wooden-cased pencil when not in use.

The object of the invention is to obtain a device for the purpose specified, which may be constructed at a very small cost, and admit of the pencil being readily fitted into and detached from it.

The accompanying drawing represents a perspective view of my invention.

A represents the holder, which is constructed of a single piece of wire, bent in a peculiar form, so as to comprise a pin, to attach the device to a coat or vest, a clamp to hold the pencil, and a spring to act upon the clamp.

The holder is constructed as follows:

One end of the wire is bent to form an eye, *a*, and the wire then bent to form three sides, *b b' b''*, the sides *b b''* being curved, and *b'* forming the connection between *b b''*.

These three sides constitute the clamp.

The side *b''* is prolonged, and is bent to form one or more circles, or convolutions, *c*, which constitute a spring, and the wire is then extended along, as shown at *d*, parallel with *b''*, and then bent, as shown at *e*, so as to form an obtuse angle with *d*, then bent quickly around, and extended, as shown at *f*, toward the angle at the junction of *d* and *e*, and is then bent transversely around *b''* and *d*, and extended downward to form a pin, *g*, to pass through the eye *a*.

The parts *e f* bear against the coat or vest, the pin *g* passing through the same, and the pencil (shown in red) is fitted between the clamp and the parts *e f*, the pencil being inserted laterally in its place, and, when required for use, drawn out longitudinally therefrom.

The pin *g* is drawn out from and passed through the eye *a* by springing the parts *b b''* toward and from each other.

I claim as new, and desire to secure by letters patent—

A pencil-holder, constructed out of a single piece of wire, bent in the manner substantially as herein shown and described.

JAMES L. MOORE.

Witnesses:

A. D. POWERS.

ALFRED B. BEERS.

476 UNITED STATES PATENT OFFICE.

JOHN H. WEEDEN, of Waterbury, Connecticut, assignor to himself and L. G. Arnold, of same place.

Letters Patent No. 91389, dated June 15, 1869.

Improved Head-Rest for Church-Pews.

The schedule referred to in these letters patent and making part of the same.

To all whom it may concern:

Be it known that I, John H. Weeden, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and improved head-rest attachment for church-pews; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

(Here follows diagram marked p. 475.)

Figure 1 is an end view of my improved head-rest, or cushion.

Figure 2 is a vertical cross-section of the same, but showing a modified form of the springs.

Figure 3 is a perspective view of the same.

Similar letters of reference indicate corresponding parts.

J. H. Weeden.

Head Rest.

No. 91,389. Patented Jun. 15, 1869.

Fig. 1.

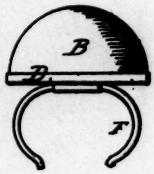


Fig. 2.

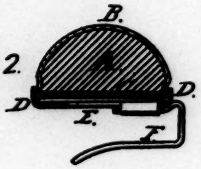
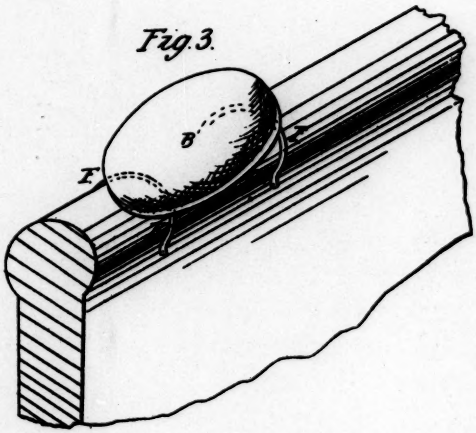


Fig. 3.



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et al.
} p. 475

Witnesses:
A. W. Almquist
O. Stinchman

Inventor:
J. H. Weeden
Per Munn & Co
Attorneys

My invention has for its object to furnish an improved device for attachment to church-pews to support the head of the worshipper when inclined, and which shall be so constructed and arranged that it may be conveniently detached from the pew when no longer required for use; and

It consists in the device constructed as hereinafter more fully described.

A represents the hair or other material with which the cushion is stuffed.

B is the covering-cloth, the edges of which are drawn over the edges of the plate C, which may be a solid plate or a ring-plate, as may be desired.

D is a ring or band of metal or other suitable material, which is formed with an inwardly-projecting flange around its upper edge, which overlaps the edge of the plate C, clamping the said covering-cloth B between the said band and the edge of the said plate.

The base-plate E is then arranged in place, and the lower edge of the band D is turned down over it, as shown in Fig. 2, clamping the edges of the cloth B between the plates C and E, firmly securing the parts of the device to each other.

To the lower side of the plate E are pivoted the springs F, which are so formed as to clasp the upper edge of the pew-back, as shown in red in Fig. 3.

When the pew is provided with a book-shelf, the springs F are made in the form shown in Fig. 2, so as to fit upon the lower edges of the said shelf.

The springs F are pivoted to the plate E, so that when not in use they may be turned down along the said plate E, allowing the device to be conveniently carried in the pocket.

Having thus described my invention,

What I claim as new, and desire to secure by letters patent, is—

An improved head-rest, or cushion, for attachment to church-pews, formed by the combination of the stuffing A, covering B, plate C, band D, base-plate E, and springs F, with each other, substantially as herein shown and described, and for the purposes set forth.

JOHN H. WEEDEN.

Witnesses:

G. C. THOMAS.
F. A. BEACH.

478 UNITED STATES PATENT OFFICE.

JAMES F. WALSH, of Hazel Green, Wisconsin.

Improvement for Caps in Horse-Collars.

Specification forming part of Letters Patent No. 108,071, dated October 4, 1870.

To all whom it may concern:

Be it known that I, James F. Walsh, of Hazel Green, in the county of Grant and State of Wisconsin, have invented a new and useful improvement in horse-collar caps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in caps for horse-collars, to be worn upon the upper part of the neck, under the top of the collar; and consists of a broad saddle-shaped cap, made of an internal stiffening shape, consisting of an iron plate and external covering of leather, with turned-up edges, front and rear, under an arrangement which is intended to prevent chafing or injury to the animal in a greater degree than those now in use will do, all as hereinafter more fully specified.

(Here follows diagram marked p. 477.)

Figure 1 is a plan view of my improved collar-cap, and Fig. 2 is an end elevation of the same.

Similar letters of reference indicate corresponding parts.

I take an elliptical-shaped plate, of sheet metal, preferably, having a considerable degree of elasticity, and bend it into the proper form, as shown in Fig. 2, to rest on the back of the neck, extending down the sides a short distance, and cover it on both sides with strong stiff leather, stitching the same together and around the edge of the metal plate, as shown by the lines A, making the under piece larger than the upper one, to form a broad margin, B, around the central stiff part, as clearly shown in Fig. 1. This margin I shape so as to turn up front and rear, and down toward the points, as shown at C, so that in case of any movement of the cap and collar on the neck lengthwise it will slide over the skin and mane of the animal without injury to it. A channel is formed in the under leather cover for the stitches to cover them smoothly.

The stiffening-plate of metal preserves a smooth under surface at all times bearing on the neck, calculated to be much more easy to the animal than is the case with caps without the stiffening-plates, which soon have creases and ridges formed in the under surface by the cramping and straining of the collar-straps and hames on the collars and caps. Horses very frequently have sores formed on the

J. F. Walsh,

Collar Cap.

No. 108,071. Patented Oct. 4. 1870.

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Fig. 1.

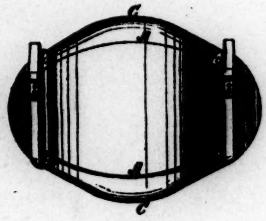
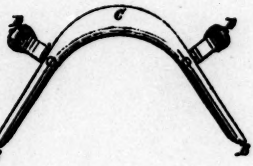


Fig. 2.



Witnesses:
A. Ohmenkendorf
Jno F. Brooks

Inventor:
J. F. Walsh
Per Munn & Co
Attorneys

J. F. WALSH, 479

Assignor to G. LAUZ.

Cap for Horse-Collar.

No. 7,951. Reissued Nov. 13, 1877.

Fig. 1.

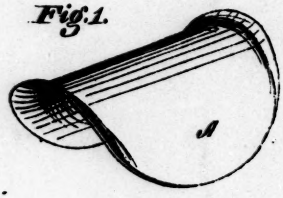


Fig. 2.

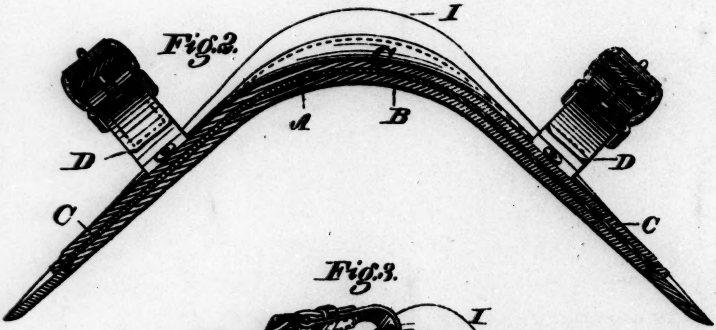
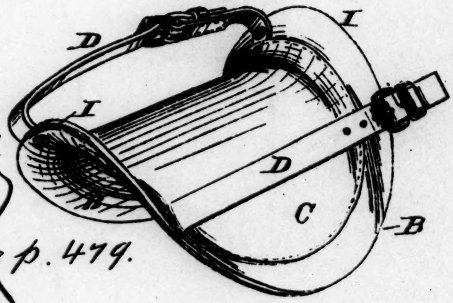


Fig. 3.



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p. 479.

Witnesses:
Donn P. Twitchell
Will N. Dodge.

Inventor:
James F. Walsh
by Dodge & Son
Attys

backs of the necks by the chafing of the collars or caps, which are entirely avoided by my improved caps. My improved cap may be narrowed or expanded to fit broad or thin necked animals. By the use of this cap, collars that are too small for the ends to meet over the top of the neck may be used by connecting them with straps to let them out, the necks being protected from the straps by the said cap. The straps D are provided for the purpose of preventing the cap from slipping out from under the collars.

Having thus described my invention, I claim as new and desire to secure by letters patent—

The improved detachable collar-cap herein described, consisting of a flexible metal stiffening-plate, covered with leather, turned up around the edge, all as shown and described.

J. F. WALSH.

Witnesses:
J. M. CHANDLER.
WILLIAM CHANDLER.

480 UNITED STATES PATENT OFFICE.

JAMES F. WALSH, of Hazel Green, Wisconsin, assignor to George Lauz.

Improvement in Caps for Horse-Collars.

Specification forming part of Letters Patent No. 108,071, dated October 4, 1870; Reissue No. 7951, dated November 13, 1877; application filed October 31, 1877.

To all whom it may concern:

Be it known that I, James F. Walsh, of Hazel Green, in the county of Grant and State of Wisconsin, have invented certain new and useful improvements in caps for horse-collars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

This invention relates to caps or pads for horse-collars; and the invention consists in making the cap or pad with an elastic plate of metal and a smooth leather lining, as hereinafter more fully set forth.

(Here follows diagram marked p. 479.)

Figure 1 is a perspective view of the metal plate detached. Fig. 2 is a longitudinal vertical section, and Fig. 3 a perspective view, of a cap complete as made with my improvements embodied therein.

Heretofore this class of articles have usually been made of leather, stuffed with hair or some similar substance, thus forming a sort of

cushion, and hence called a "pad," though sometimes they consisted of one or more thicknesses of leather, without any stuffing.

When thus made the leather was apt to wrinkle in use, thus making the surface which bears upon the animal's neck rough and irregular, and thereby the skin was liable to be abraded, thus making the neck sore, causing pain to the animal, and lessening its efficiency.

The object of the present invention is to overcome or remove these objections by producing a pad, or, as I prefer to term it, a "cap," which, while being elastic, shall also present and retain a smooth even surface in contact with the neck of the animal.

To accomplish these results, I take a plate of sheet metal, preferably having a considerable degree of elasticity, and bend it to the proper form, as represented in Fig. 1, to rest on the neck, and extending down the sides a short distance. To the under side or surface of this metal plate A is secured a sheet of leather, B, which is somewhat larger than the metal plate A, and is so arranged as to project more or less around the edge, thus forming a margin, I, as shown in Figs. 2 and 3. This margin I turn up at front and rear, as shown in Fig. 3, but at the sides it extends downward, as shown in Fig. 2, so as to fit under the collar.

The lining or leather sheet B is made of strong stiff leather, and should be secured to the metal plate in such a manner as to keep it smooth and prevent it from wrinkling, so that, in case of any movement or slipping of the cap and collar on the neck, it will slide over the skin and mane of the animal without injury, and so that, when resting on the neck, it will have a smooth and even bearing thereon, as it would not have if wrinkled, or if its surface was uneven and rough.

The metal plate A and the lining B may be fastened together in any suitable manner; but the plan which I prefer is shown in the drawings, and consists in stitching together two pieces of leather, the lining B and another piece, C, which latter is slightly larger than the metal plate A, and is placed over it, the stitching extending close around the edge of the plate, as shown by the dotted line on Fig. 3, the metal plate being thus held in position between the two pieces of leather, as shown in Fig. 2. Straps D are secured to the edges of the cap in the usual manner, for fastening it to the collar and keeping it in place when in use.

It will readily be seen that by this construction the metal plate preserves a smooth under surface at all times, rendering the cap much more easy to the animal than when made without the stiffening-plate, in which case they soon have creases and ridges formed in the under surface by the cramping and straining of the collar-straps and hames on the collar and caps.

By using an elastic metal plate the cap may be compressed or expanded to fit thick or thin necked animals, or to adapt it to the varying conditions of the same animal.

Having thus described my invention, what I claim is—

481 1. A cap for horse-collars consisting of a flexible metal plate with a smooth leather lining, substantially as described.

2. The combination of the flexible metal plate A and the smooth

T. C. RICE.

Improvement in Eye-Glass Supporters.

No. 129,170. Patented July 16, 1872.

No. 348.
McClain
v.
Ortmayer
et al.
p. 482.

Fig. 1.

Fig. 2.

Witnesses.
S. N. Piper.
J. Shaw.

Thomas C. Rice.
by his attorney.
R. H. Eddy

leather lining B, provided with the upturned edges I, substantially as set forth.

3. The combination of the leather lining B, the metal plate A, and the leather covering C, all united, substantially as shown and described.

JAMES F. WALSH.

Witnesses:
A. B. P. WOOD,
DANIEL BOWMAN.

483 129,170

UNITED STATES PATENT OFFICE.

THOMAS C. RICE, of Worcester, Massachusetts.

Improvement in Eye-Glass Supporters.

Specification forming part of Letters Patent No. 129,170, dated July 16, 1872.

To all persons to whom these presents may come:

Be it known that I, Thomas C. Rice, of the city and county of Worcester, of the State of Massachusetts, have invented a new and useful eye-glass supporter; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

(Here follows diagram marked p. 482.)

Figure 1 is a front elevation, and Fig. 2 a side view of it.

It is intended to be hooked to the collar or other suitable part of the vest or dress of a person, and to be used for supporting an eye-glass or other article capable of being hitched upon the spring-hook making part of the supporter. It consists of an elastic or inelastic hook, A, formed essentially as described, and two sharp or pointed hooks, B C, or a wire bent so as to form such, all being connected together and arranged as shown. The two sharpened hooks have their points extended toward each other.

In securing the article to a vest-collar one of the hooks B C is first to be hitched into the collar, after which the cloth of the collar is to be folded or gathered up between the said hooks, so as to allow the second of them to be hitched into it in the opposite direction to that of the introduction of the first one. The hook A, being thus secured to the vest or its collar, may be employed to give support to an eye-glass or pair of spectacles, or any other thing capable of being hooked upon it.

I claim the new article of manufacture described, consisting of—

The three hooks A B C, formed and arranged substantially in manner as specified, and for use as stated.

THOMAS C. RICE.

Witnesses:
R. H. EDDY.
S. N. PIPER.

485 UNITED STATES PATENT OFFICE.

LEMUEL L. HULL, of Oskaloosa, Iowa.

Letters Patent No. 112,713, dated March 14, 1871.

Improvement in Pads for Horse-Collars.

The schedule referred to in these letters patent and making part of the same.

To all whom it may concern:

Be it known that I, Lemuel L. Hull, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented an improved pad for horse-collars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

(Here follows diagram marked p. 484.)

Figure 1 is a perspective view of my improved collar-pad, showing the projecting flanges for retaining the collar in position and the loops through which the ends of the collar pass.

Figure 2 is a central sectional elevation.

Figure 3 is another section.

Corresponding letters refer to corresponding parts in the several figures.

This invention relates to pads for the collars worn by horses, it being designed to prevent the chafing of the neck of the animal, and also to prevent the hair from being worn off; and, to this end,

It consists in providing an India-rubber pad to be used in connection with any ordinary collar that encircles the neck of the animal, as will be more fully explained hereinafter.

A in the drawing refers to a pad, which is to be made in the arched form shown in the drawing, or in such form as will best adapt it to the neck of the animal.

Its width is to be equal to the width of the collar, and it is to be provided with flanges B B upon its outer edges, which are to project therefrom for a distance sufficient to enable it to keep the collar in position with reference thereto, so that it may not work out from under the collar.

It is also to be provided with loops C C near its ends, through which the upper ends of the collar are to be passed when being placed upon the neck of the animal. These loops may be made of the same material as the balance of the pad is, or they may be made of leather or any other flexible material; and they may be stitched to the flanges of the pad, or, if made of metal, may be riveted thereto.

It will be observed that the pad is thicker in its cross-section at the top. This form of construction is adopted with a view of giving additional strength to it at that point, as well as additional elas-

L. L. Hull,

Horse Collar Pad.

No. 112,713. Patented Mar. 14. 1871.

Fig. 1

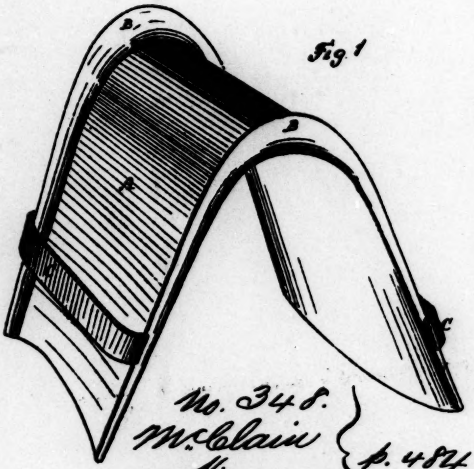

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Fig. 2.

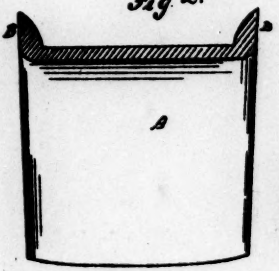
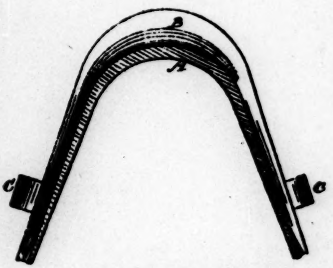


Fig. 3.



Witnesses
A. Ruppert
Edw. J. Kils

L. L. Hull
Inventor.
D. P. Holloway & Co
Attys

F. FABRICI.

Improvement in Head-Rests.

No. 131,816. Patented Oct. 1, 1872.

Fig. 1.

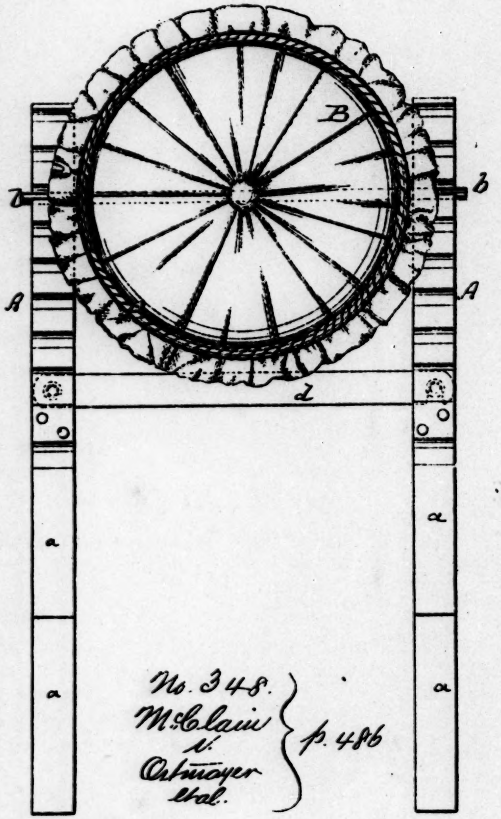
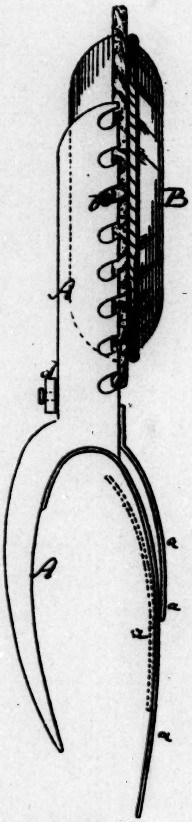


Fig. 2.



No. 348.
McClain
v.
Ostmayer
et al.
p. 486

Witnesses:

A. Benneckendorf.
C. Sedgwick

Inventor:

F. Fabrici

Per [signature]

Attorneys.

ticity, so that, as the weight of the collar rests upon it, it may serve as a spring to some extent, and thus relieve the neck of the animal from sudden jars.

In manufacturing these pads the material is to be prepared as in the manufacture of various articles now made of India rubber, and then pressed in molds which will give them the proper shape and dimensions.

I am aware that harness-pads have been used made of leather lined with India rubber, but I know of no case in which solid molded rubber has been used for this purpose; and my pad differs from any heretofore known.

Claim.

Having thus described my invention,

What I claim, and desire to secure by letters patent, is—

A solid molded India-rubber collar-pad, substantially such as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEMUEL L. HULL.

Witnesses:
J. RHINEHART.
GEO. A. WELLS.

487 UNITED STATES PATENT OFFICE.

FELICE FABRICI, of New York, N. Y.

Improvement in Head-Rests.

Specification forming part of Letters Patent No. 131,816, dated October 1, 1872.

To all whom it may concern:

Be it known that I, Felice Fabrici, of the city, county, and State of New York, have invented a new and improved head-rest for car-seats, of which the following is a specification:

(Here follows diagram marked p. 486.)

Figure 1 is a front elevation of my improved head-rest for car-seats. Fig. 2 is a side elevation of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an adjustable head-rest to be applied to the backs of railroad-car seats for increasing the comfort of the passengers. The invention consists in the combination of notched standards which are applied by spring-jaws to the seat-backs with a head-rest having projecting pins that are supported in the notches of the strandards.

A A in the drawing are the two head-rest standards. Their lower ends are bifurcated and yielding, the springs *a a* being either single, double, or treble. These forked springs serve to hold the standards on the backs of the seats. The upper parts of the standards are notched at regular intervals. B is a cushion of suitable size and shape. It has projecting pins *b b* at the sides, and is by them supported in the notched standards, as shown, and can be set higher or lower in the notches to suit the height of the person using it. The dotted lines in Fig. 2 show a third spring attached to the double spring *a*, which, however, may be dispensed with as well as the outer second spring *a*. A brace, *d*, is pivoted to the back of one of the standards A and hooked over a projecting pin on the other standard, and serves to hold the standards the requisite distance apart, allowing them, however, to be conveniently folded together when the head-rest is not to be used.

Having thus described my invention, I claim as new and desire to secure by letters patent—

1. The combination of the cushion B and pins *b b* with the notched standards A A, so constructed at their lower ends as to embrace a chair or seat-back, as specified.

2. The pivoted hook brace *d*, in combination with the standards A A, and a cushion supported thereby, substantially as specified.

FELICE FABRICI.

Witnesses:
C. SEDGWICK.
ALEX. F. ROBERTS.

489 UNITED STATES PATENT OFFICE.

THOMAS P. MARSTON and NATHAN M. PHILLIPS, of New York, N. Y., assignors to Nathan M. Phillips.

Improvement in Tag-Hooks.

Specification forming part of Letters Patent No. 143,364, dated September 30, 1873; application filed January 6, 1872.

To all whom it may concern:

Be it known that we, Thomas P. Marston and Nathan M. Phillips, of New York city, in the State of New York, have invented an improvement in tag-hooks, of which the following is a specification:

It has long been common to attach tags of pasteboard, paper, glazed muslin, leather, parchment, or the like, to bales of cloth and other goods by wire hooks. This invention is intended to facilitate this operation.

The hook and its adjuncts are of a form which we believe can be easily produced by machinery, and the wire, if made of reasonably elastic material, will serve for a great number of times. The locking is complete and reliable, and the point of the hook lies so close to the other parts as to be unobjectionable.

T. P. MARSTON & N. M. PHILLIPS. 488

Tag-Hooks.

No. 143,364. Patented September 30, 1873.

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et al.
} p. 488

Fig. 1.

Fig. 2.

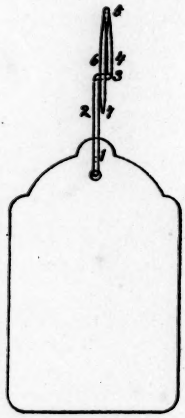

Fig. 3.

Witnesses:
W. H. Hinckel.
A. T. Langston.

Inventors:
T. P. Marston
and N. M. Phillips
by their attorney J. D. Stetson

Omitting all description of the machinery for its production, which we have not yet matured to our full and perfect satisfaction, and may make the subject of further letters patent, we will proceed to describe the hook and its adjuncts by the aid of the accompanying drawings, which form a part of this specification.

(Here follows diagram marked p. 488.)

Figure 1 is a side view of the hook, open. Fig. 2 is a view of the hook from the front, open; and Fig. 3 is a side view, closed.

Similar letters of reference indicate like parts in all the figures.

The entire device is formed of a single piece of spring-wire. We will designate its several parts as 1, 2, 3, &c. 1 is the loop or ring, which takes hold, in the ordinary manner, of a tag of parchment or other material. 2 is a straight portion of the shank. 3 is a semi-ring or short curved portion of the wire lying in a plane at right angles to the shank 2. 4 is a further straight portion of the shank. 5 is a ring, or nearly complete ring, of wire, adapted to retain the edge of the cloth or other goods in which the hook is inserted. 6 is a further straight wire, ending in a sharp point, marked 7.

The operation of the invention will be readily understood. The sharp point 7 is introduced and the hook made to connect properly with the goods; then the point 7, with the straight portion 6 near the point of the hook, is sprung by the thumb-nail or otherwise into the position shown in Fig. 3, where its elasticity holds it tightly in the semicircular curve 3 as long as may be desired.

To release the tag-hook the finger or other part is applied to the straight part 6 near the point, and it is snapped out of its lodgment in the curve 3, and allowed to resume the condition shown in Fig. 1. The hook may now be readily disengaged from the goods and retained for future use.

We prefer that the straight part 4 of the shank shall stand at such a distance from the straight part 6 as will allow the edge of the cloth to extend between when necessary. This is frequently necessitated by carelessness in attaching the hook. It is a great advantage to be able to attach the hooks without being scrupulously careful how far from the edge the hook is inserted; but we deem it an essential feature of the invention that the straight part 2 shall lie close to the point when the part 6 is engaged with the offset 3.

We claim as our invention—

The self-locking spring-hook having the simple offset 3, formed with a curve, as shown, for the purposes specified.

In testimony whereof we have hereunto set our names in presence of two subscribing witnesses.

T. P. MARSTON.
N. M. PHILLIPS.

Witnesses:
THOMAS PRUDEN.
C. KIERSTED.

491 UNITED STATES PATENT OFFICE.

ISAAC LINDSLEY and JOHN MACKINTOSH, of Pawtucket, R. I.

Improvement in Linings for Horse-Collars, &c.

Specification forming part of Letters Patent No. 143,987, dated October 28, 1873; application filed July 24, 1873.

To all whom it may concern:

Be it known that we, Isaac Lindsley and John Mackintosh, of Pawtucket, in the county of Providence and State of Rhode Island, have invented certain improvements in harness and equipments for horses and other animals, of which the following is a specification:

Our said invention relates to a new lining for the various articles of harness and equipments for horses and other animals; and consists of making said lining from and out of non-felting hair, or substantial imitations thereof, prepared substantially as hereinafter described.

The accompanying drawing is hereby made a part of this specification, similar letters of reference indicating corresponding parts.

(Here follows diagram marked p. 490.)

Figure 1 of said drawing is a view of a sweat-collar lined in the manner and with the materials herein mentioned and described, said figure showing the under side or fibrous or hairy surface of said lining. Fig. 2 is a sectional view of the collar shown in Fig. 1.

a shows the said non-felting hair, or the said substantial imitations thereof. *b* is the back, on or to which the lining *a* is or may be stitched. *c* is a covering for said back *b*, which may be found desirable for sweat-collars, but which may be used or omitted at pleasure. *d* shows a binding around the edges of said collar, which may be used when desired. *e e* are lines showing the stitches or quilting where and by which the said non-felting hair, or the said substantial imitations thereof, are secured to the back by stitching.

The said non-felting hair, curled or uncurled, and the said substantial imitations thereof, may be prepared substantially as described in our letters patent of the United States, numbered 124,598, and dated the 12th day of March, A. D. 1872; or said non-felting hair, curled or uncurled, and the said substantial imitations thereof, may be simply moistened and pressed into sheets or other required shapes, said pressing being either hot, warm, or cold, and the substances aforesaid being either wet, moist, or dry before or during said pressing.

These sheets of non-felting hair, and the said substantial imitations thereof, prepared substantially as aforesaid, are to be cut to the required shape, and stitched or otherwise fastened on, or secured to, a back of cloth, leather, or other suitable material. In this condition it is easily applied to, or used with, the different articles of

I. LINDSLEY & J. MACKINTOSH. 490

Linings for Horse-Collars, &c.

No. 143,987. Patented Oct. 28, 1873.

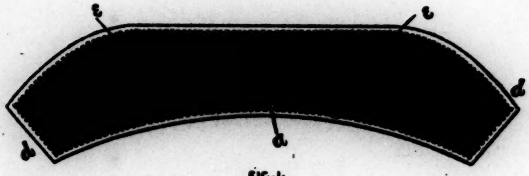

FIG. 1.

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FIG. 2.

WITNESSES. INVENTORS.

Thos. P. Barnefield. Isaac Lindsley

Geo. A. Sanders. John MacKintosh

J. M. BRIGHT.

Horse-Collars.

492

No 157,367.

Patented Dec. 1, 1874.

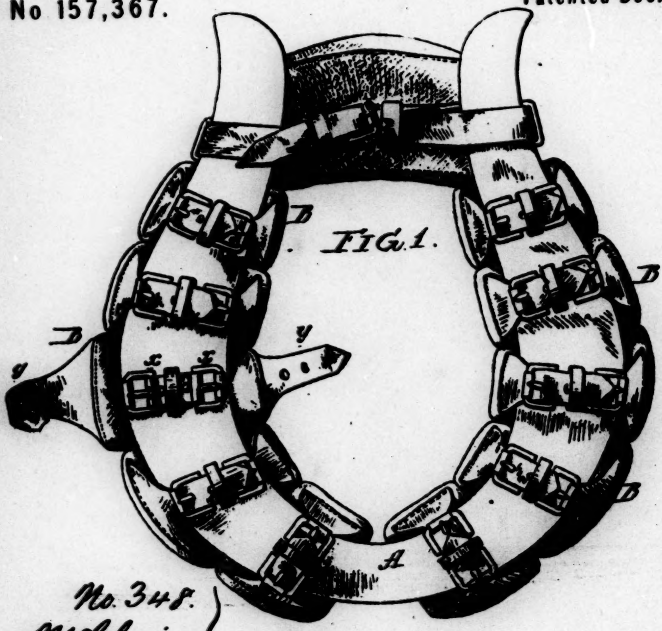

FIG. 1.

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FIG. 2.

Witnesses. Hulbert Howson
Thomas McIlvain

John M. Bright
by his Attys.
Howson and Son

harness, or parts thereof, by any of the well-known methods, the back aforesaid being attached to the parts of the harness or equipments requiring the lining.

What we claim as our invention, and desire to secure by letters patent, is—

Linings of harness and other equipments for horses and other animals, made of the materials and in the manner substantially as described.

ISAAC LINDSLEY.
JOHN MACKINTOSH.

Witnesses:

THOS. P. BARNEFIELD.
OSCAR A. TANNER.

493

UNITED STATES PATENT OFFICE.

JOHN M. BRIGHT, of Bernville, Pennsylvania.

Improvement in Horse-Collars.

Specification forming part of Letters Patent No. 157,367, dated December 1, 1874; application filed October 23, 1874.

To all whom it may concern:

Be it known that I, John M. Bright, of Bernville, Berks county, Pennsylvania, have invented an improvement in horse-collars, of which the following is a specification:

The object of my invention is to so construct a horse-collar that, in case the neck of the horse becomes "galled," the sore spot can be relieved from pressure and abrasion without interfering with the proper duties of the collar; and this object I attain in the manner which I will now proceed to describe, and which is shown in the rear view, figure 1, and sectional view, Fig. 2, of the accompanying drawing.

(Here follows diagram marked p. 492.)

In constructing my improved horse-collar, I use a wooden frame, A, of a shape approximating to that of an ordinary horse-collar; and to this frame I attach, by means of buckles and straps or otherwise, a number of detachable pads, B, each of which consists of a bag of leather or suitable fabric, stuffed with hair or other appropriate filling material; and to the top of the frame A is secured a similar pad, of a size large enough to extend completely across from one side to the other of the said frame.

By thus constructing the collar, any portion of the neck of a horse which shows signs of galling may be relieved from further abrasion by removing the pad which bears upon the galled spot. The pad being of limited dimensions, its removal will not detract from the proper functions of the collar. In fact, if two or even three pads,

arranged at a distance from each other, be removed, the collar will continue to perform its proper duty.

By thus relieving the galled place the extension of the sore will not only be prevented, but the sore itself will have an opportunity to become quickly healed.

In the present instance the pads are secured to the frame by attaching to the latter two buckles, *x x*, for each pad, which is provided with two straps, *y y*, one for each buckle.

I claim as my invention—

A horse-collar consisting of a frame, A, combined with a number of detachable pads, B, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN M. BRIGHT.

Witnesses:
ALBERT F. SCHOCK.
SIMON RIEGEL.

495 UNITED STATES PATENT OFFICE.

WILLIAM H. HOLABIRD and AARON PARKS, of Valparaiso, Indiana.

Improvement in Cartridge-Shell Holders.

Specification forming part of Letters Patent No. 160,432, dated March 2, 1875; application filed February 25, 1875.

To all whom it may concern:

Be it known that we, William H. Holabird and Aaron Parks, of Valparaiso, in the county of Porter and State of Indiana, have invented certain new and useful improvements in cartridge or shell holders; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

(Here follows diagram marked p. 494.)

Our invention relates to an improvement in that class of cartridge or shell holders which are used for carrying the brass or paper shells used with breech-loading shot-guns, and by means of which such shells may be carried securely with muzzles down, and without danger of the charge dropping out.

We will now describe in detail the construction and manner of using our invention, referring to the accompanying drawing, and to the letters and figures marked thereon.

Figure 1 is a pespective view of our improved cartridge or shell holder. Fig. 2 is a perspective view of the same as attached to a belt. Fig. 3 shows a shell in the holder, and a section of a belt,

W. H. HOLABIRD & A. PARKS. 494

Cartridge Shell-Holder.

No. 160,432. Patented March 2, 1875.

Fig. 1.

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Fig. 2.

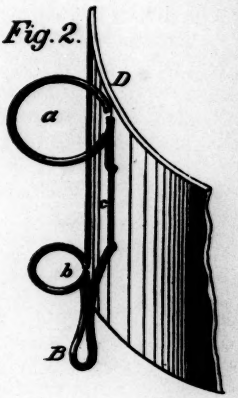


Fig. 3.

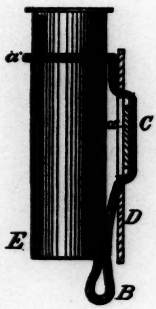
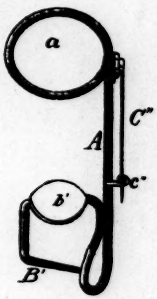


Fig. 4.

Fig. 5.



WITNESSES-
Philip W. Hale.
D. B. Gallatin

INVENTOR-
William H. Holabird
Aaron Parks,
per Wm Beale Hale, Atty.

showing the manner of attaching and securing the holder. Figs. 4 and 5 are modifications of our invention.

A is a piece of elastic wire, having a ring, *a*, formed at one end thereof, said ring being bent over at a right angle to wire A, the other end of which is bent back toward ring *a*, forming a hook or loop, B. At the end of this hook or loop B, as turned toward ring *a*, is formed a ring, *b*, of such diameter as to fit easily into the chamber of a shell, and bent over to a position parallel with ring *a*. The hook B inclines toward the back wire A, and its upper portion touches, or nearly touches, said back wire. About midway between the two rings *a* and *b* a loop, C, is formed in the wire A by bending said wire backward from ring *a*, then downward, and then parallel to ring *a*, and again downward, or away from ring *a*. In fastening the shell-holder to a belt, as shown in Figs. 2 and 3, the loop C is forced through a slit, *c*, terminated at each end by holes, as shown, for the reception of the wire. A strap, *d*, of proper size to fit tightly, or a leather wedge, is then passed through the loop, and prevents it from being drawn back through the slit, and thus secures the shell-holder snugly to the belt D.

In using our improved shell-holder for the purpose intended the muzzle of a shell, E, is inserted through the ring *a*, and passes over ring *b* on hook B until the wad in front of the charge rests upon ring *b*, one side of the shell below the wad being firmly clamped between hook B and wire A, as shown in Fig. 3, where it is securely held by the elasticity of the wire.

The ring *b*, upon which the wad rests, prevents the charge from being jolted out of the shell, which is supported in an upright position by ring *a*, which surrounds its upper end.

In the modification of our invention shown in Fig. 4 the charge-supporter consists of a loop, B′, formed at the end of wire A, and bent hook-like toward ring *a*, the inner portion of said loop impinging against wire A for clamping the shell. On top of loop B′ is soldered or otherwise attached a round plate, *b′*, which fits in the chamber of a shell, and upon which the wad rests.

Instead of the loop C, Fig. 1, for attaching the holder to the belt, this modification shows a plate, C′, attached to wire A, said plate being provided with holes *c′*, by means of which it may be riveted to a belt or other article.

The modification shown in Fig 5 is intended for attachment to a coat or vest, and, as a means of attachment, is provided with a hinged pin, C″, and catch *c″*, similar to those of a breast-pin.

These shell-holders may be attached in a series to a belt; or, by means of the pins, may be attached to a coat or vest in convenient places, and, owing to the certainty with which they retain the shells and prevent displacement of the charge, they supply a want long felt by sportsmen.

Having now fully described the construction and explained the manner of using our invention, we claim and desire to secure by letters patent—

496 1. A shell-holder consisting of ring *a*, back wire A, and spring shell-clamp and charge-supporter, substantially as described.

2. The combination of ring *a*, back wire A, spring-hook B, and ring *b*, arranged substantially as shown and described.

3. A shell-holder consisting of ring *a*, wire A, attaching-loop C, spring-hook B, and ring *b*, substantially as shown and described.

In testimony that we claim the foregoing as our own invention we affix hereto our signatures in presence of two witnesses.

WILLIAM H. HOLABIRD.
AARON PARKS.

Witnesses:
IKE CROSS.
JAMES G. SMITH.

498 UNITED STATES PATENT OFFICE.

ANDREW ORTMAYER, of Chicago, Illinois.

Improvement in Gig-Saddles.

Specification forming part of Letters Patent No. 162,095, dated April 13, 1875; application filed March 8, 1875.

To all whom it may concern:

Be it known that I, Andrew Ortmayer, of Chicago, in the county of Cook and State of Illinois, have invented an improvement in gig-saddles, of which the following is a specification:

The object I have in view is the production of a gig-saddle that will be simple in construction, and greatly lessened in cost; and my invention therein consists in dispensing with the ordinary saddle-tree into which the terrets are usually screwed, and having, instead, metal plates stitched in pockets on the under side of the skirts, which are provided with screw-threaded holes to receive bolts of the terret-rings and a metal jockey carrying the check-hook, to which and the skirts an ordinary pad is removably secured, all as more fully hereinafter set forth.

(Here follows diagram marked p. 497.)

Figure 1 is a perspective view of my improved gig-saddle and pad. Fig. 2 is a plan view of the pad. Fig. 3 is a plan of the skirt. Fig. 4 is a cross-section of the pad at *x x*.

A A represent the skirts, and B B the billets, each billet being cut from a single piece of leather and secured by rivets and loops to the skirts. C is the metal jockey, to which the check-hook D is secured. The jockey has two wings, C′, that project over the billets as far as the terret-rings E, and are held down by the bolts of the terret-rings passing through holes in their ends. The terret-rings have the usual screw-threaded bolts that pass through holes in the billets and

A. ORTMAYER. 497

Gig-Saddle.

No. 162,095. Patented April 13, 1875.

No. 348. McClain v. Ortmayer et al. } p. 497

Fig: 1

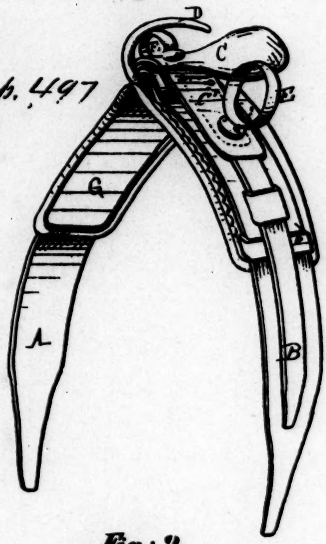


Fig: 2

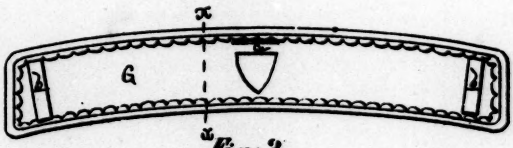


Fig: 3.

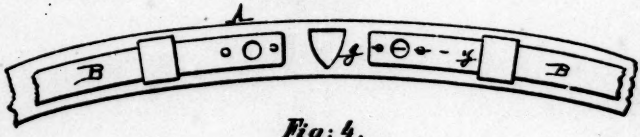


Fig: 4.

Fig: 5.

Attest.
Edward Barthel.
B. C. G. Jones

Inventor.
A. Ortmayer
By Atty
Thos. D. Sprague

R. C. NICHOLS.

Fastenings for Wearing-Apparel.

No. 164,200. Patented June 8, 1875.

Fig. 1.

Fig. 2.

No. 348.
McClain
v.
Ortmayer
et al.
p. 499

Fig. 3.

Witnesses.
L. H. Latimer.
Wm. Pratt.

Inventor.
Robert C Nichols.
PER Crosby & Gregory
Att'ys.

skirts into plates *a*, secured in pockets on the under side of the skirts. These plates are of considerable size, each having a screw-threaded hole in its center to serve as a nut for the terret-screw. These plates are kept in place, covered and concealed by leather covers F, stitched to the under side of the skirts.

It has been the custom, in completing a saddle, to form a pad to fit the tree and attach it permanently. In my saddle, however, it is only necessary to use the ordinary removable pad G, which is hung to the skirts by loops *b*, and to the check-hook by the slots *c*, through which the hook passes.

By this manner of fastening the terret-bolts, in case one should break, it can be replaced without ripping the saddle, and the ordinary removable pad can be used, thus making a light saddle easily taken apart for repairs or cleaning.

What I claim as my invention, and desire to secure by letters patent, is—

In a gig-saddle, the combination, with the metal jockey, of the skirts A A, provided with pockets F F, to secure the plates *a a*, the said plates each having a screw-threaded hole for the reception of the terret-ring bolts, substantially as described and shown.

ANDREW ORTMAYER.

Witnesses:
J. M. HOYLE.
S. B. LEWIS.

500 UNITED STATES PATENT OFFICE.

ROBERT C. NICHOLS, of Boston, Massachusetts.

Improvement in Fastenings for Wearing Apparel.

Specification forming part of Letters Patent No. 164,200, dated June 8, 1875; application filed May 11, 1875.

To all whom it may concern:

Be it known that I, Robert C. Nichols, of Boston, in the county of Suffolk and State of Massachusetts, have invented an improved fastening for wearing apparel, &c., of which the following is a specification:

This fastening is designed for attachment by sewing with thread to garments and other objects made of flexible material, in cases where considerable strain calls for large holding-surface in order to distribute the stress and the holding and securing thread-stitches over ample area.

(Here follows diagram marked p. 499.)

In the drawing, the improved fastening is shown in figure 1 in face elevation, as sewed to a waistband of a skirt or other clothing, in readiness to be connected to a shoulder-strap harness, for the purpose of transferring weight where it is most easily borne with

the least injurious effect. Fig. 2 shows, in perspective, the improved fastening as caught into a link of a pair of braces or suspenders; and Fig. 3 shows an edge view of the fastening attached to the waistband of a pair of drawers, and caught upon the waistband of a pair of trowsers.

The fastening is preferably made by a stamping and punching operation with suitable dies from sheet metal, the hooked part being afterward bent to the curves desired. Said bent part is marked *a* in the drawing, and is integral with the flat part *b*, which is lightened by removal of its center, so that a flat ring is formed, which is pierced with many holes, through which the thread and needle is passed in the act of sewing the hook to any textile or other suitable flexible material like furs, leather, &c. The inner and outer edges of the ring are raised above the surface pierced with thread-holes, so as to protect the thread from wear by chafing.

I claim—

As a new article of manufacture, the fastening shown and described, consisting of the hooked part combined with the flat ring pierced with thread-holes, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT C. NICHOLS.

Witnesses:
J. B. CROSBY.
L. H. LATIMER.

503 UNITED STATES PATENT OFFICE.

SAMUEL AYRES, of Richmond, Virginia.

Improvement in Trusses.

Specification forming part of Letters Patent No. 168,957, dated October 19, 1875; application filed November 28, 1874.

To all whom it may concern:

Be it known that I, Samuel Ayres, of the city of Richmond, in the county of Henrico and State of Virginia, have invented certain improvements in trusses, of which the following is a specification:

My invention relates to improvements in trusses, for the relief and cure of ruptures, such as described in the specification of letters patent granted to me bearing date the 19th day of May, 1868, No. 77947, the object of which is to produce a truss which shall be thoroughly self-adjusting, and accommodate itself to every position of the body, the pad being supported with capability of revolution on an elastic belt or band by means of a peculiarly-constructed loop, the nature of which will be hereinafter fully explained by reference to the drawings.

(Here follow diagrams marked pp. 501 & 502.)

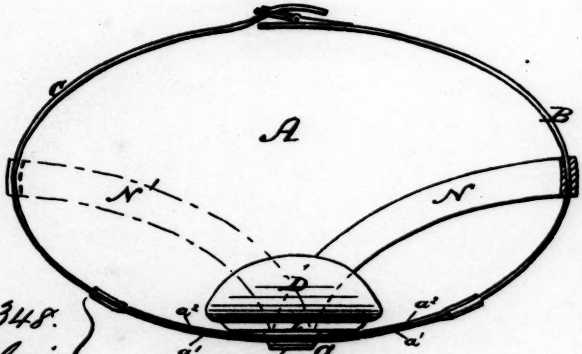
2 Sheets--Sheet 1.

S. AYRES.

Truss.

No. 168,957. Patented Oct. 19, 1875.

Fig. 1.



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et al.
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Fig. 2.

Fig. 4

Fig. 3.

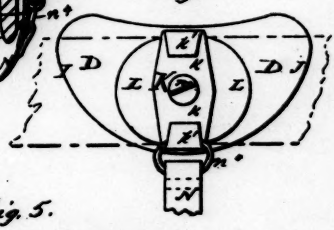
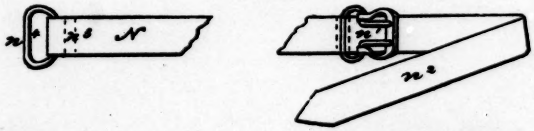


Fig. 5.



Witnesses:-
W. Morris Smith
Chas J. Good

Inventor
Samuel Ayres
by his attorney
Colborne Brookes

502

2 Sheets--Sheet 2.

S. AYRES.

Truss.

No. 168,957. Patented Oct. 19, 1875.

Fig. 6.

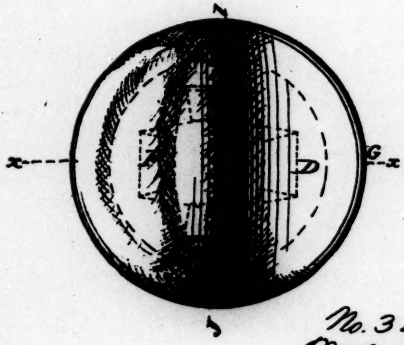


Fig. 7.

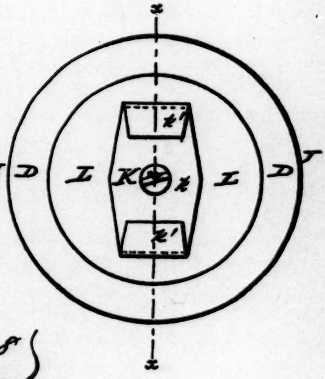


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Fig. 8.

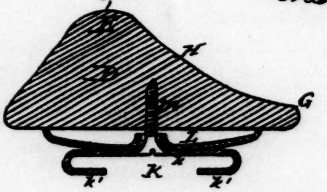


Fig. 9.

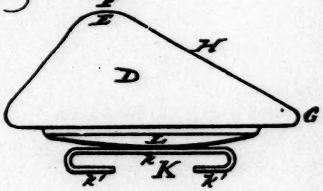


Fig. 10.

Witnesses
W. Morris Smith
Chas. Hoard

Inventor
Samuel Ayres
by his attorney
Colborne Brookes

Figure 1 represents a plan view of the belt or band with my improvements applied thereto. Figs. 2 and 3 represent opposite side views; Fig. 4, a section of one modification of my improved pad, and Fig. 5 a detached view of a perineal strap and attachments. Fig. 6 represents a plan, Fig. 7 an under side view, and Fig. 8 a section, of a slight modification of my improved pad. Fig. 9 shows another modification of my improved pad.

A represents the belt or band, the center portion *a* of which is composed of a layer of leather or other suitable substance, a^1, mounted upon a non-elastic backing of webbing, a^2. To each end of this non-elastic portion is connected an elastic strap, B C, the part B being provided with a buckle or other suitable means of attachment adapted to receive and hold the end of the part C with capability of adjustment, according to the size of the waist of the wearer. D is the pad, which is, by preference, formed of cork or some suitable hard wood. It may, however, be formed of other material, and is constructed with a raised pressing-surface, E, extending partially across the surface of the pad D, and having its apex at F, from which point it is gradually curved to the point G, and presents a concave surface, H, with a flange extending from the point I to the point J only, in place of all the way round, as described in my former specification herein referred to. K represents my improved loop, which, as shown, is constructed with a flat extended surface, *k*, the extremities k^1 of which are bent or otherwise formed to turn over the surface *k* in such manner as to be capable of embracing the belt A. On the under side of the extended surface of the loop K an annular projection, k^2, is formed, which fits into a correspondingly-formed bearing, *l*, in a plate, L. Through the hole in the center of the annular projection k^1 and the bearing *l* a stud or screw, *m*, is secured to the pad in such manner that the loop K may turn freely on the plate L. N, Fig. 1, represents an extra or perineal strap, of which there may be two, as indicated by dotted lines N′, adapted to pass between the limbs of the wearer of the truss, for the purpose of keeping the belt A and pad or pads D in correct position. The strap N at n^1 is provided with a buckle adapted to receive and hold the end n^2 after it has been passed over the belt A, while the opposite end n^3 of the strap N is provided with a stirrup or loop, n^4, adapted to pass over and be retained by one of the hooks or projections on the pad D.

In Figs. 2, 3, 4, 6, 7, 8 the surface H of the pad D is shown curved or concave, while in Fig. 9 the surface H is simply inclined.

Fig. 10 represents a slight modification of my improved belt, in which the elastic material is constructed all the way round, the center portion *a* being rendered non-elastic by the application of a layer of leather or other substance, a^1.

It will be readily seen by surgeons and others acquainted with the treatment and cure of hernia, that the greatest advantage of my peculiar construction of pad is that by means of the raised pressing-surface E and surface H the pad is exactly suited to fit the part of the inguinal region where pressure is necessary, and that when applied in proper position it will retain and cure hernia when all other

trusses fail, by reason that the outside of the raised part or crest E has the curve of Poupart's ligament in its direction from the crest of the ilium to the pubes, with which it unites.

504 The raised pad or crest E is designed to press upon and close the external and internal rings and inguinal canal, so that it is impossible for a hernia to escape.

The concave portion H with its flange is intended to rest upon the walls of the abdomen and form a fulcrum for the crest, and therby keeping the pad from tilting and suffering the hernia to escape.

This tilting of the pad is an objection to all pads I have seen, but from which my pad is entirely free.

Having thus described my invention, what I claim, and desire to secure by letters patent, is—

The combination, with a truss-pad, of a loop, K, having an annular projection, k^2, a bearing, l, plate L, stud or screw m, all constructed and operating substantially as described.

SAM'L AYRES.

Witnesses:
JOHN H. GUY.
HENRY A. WISE.

506 UNITED STATES PATENT OFFICE.

EDWIN W. GROVE, of Paris, Tennessee.

Improvement in Pencil-Holders.

Specification forming part of Letters Patent No. 187,621, dated February 20, 1877; application filed October 30, 1876.

To all whom it may concern:

Be it known that I, Edwin W. Grove, of Paris, in the county of Henry and State of Tennessee, have invented certain new and useful improvements in pencil-holders; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

(Here follows diagram marked p. 505.)

Figures 1, 2, and 3 represent perspective view of my improved pencil-holder or attachment. Fig. 4 is an end view. Fig. 5 is the top of a pencil, prepared to receive the holder. Fig. 6 represents the holder attached upon the pencil; and Fig. 7 shows the method of attaching a pencil having my improved holder to the coat.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to that class of devices that are used in

E. W. GROVE.

PENCIL-HOLDER.

No. 187,621. Patented Feb. 20, 1877.

Fig. 1

Fig. 2.

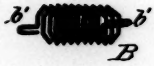


Fig. 3.

Fig. 5.

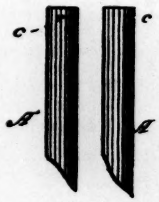


Fig. 4.

Fig. 6

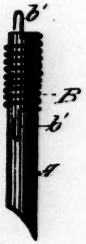
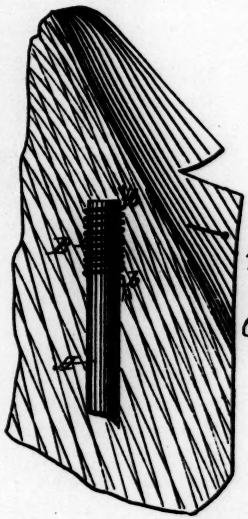


Fig. 7.



No. 348.
McClain
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Ortmayer
et al.
p. 505

Attest:
Chas. Jacobus
John P. Brooks.

Inventor:
Edwin W. Grove
by Louis Bagger & Co.
Attys.

combination with a lead-pencil, pencil-holder or pen-holder, for the purpose of securing it conveniently upon the outside or inside of the coat or vest; and it consists in the combination, with a pen or pencil-holder, of a coiled spring, having sharpened prongs or spurs, that may readily be inserted into the lining of the coat, which is secured permanently upon and removed with the pencil or pencil-holder, substantially as hereinafter more fully described and pointed out in the claim.

In the drawing, A is a lead-pencil, which may be round, hexagonal, flat, or of any other suitable shape. B is a spiral spring, made of iron, steel, brass, hard-rubber, or any other suitable material of sufficient springiness or elasticity.

This coiled spring may be round, hexagonal, or flattened, so as to correspond to the shape of the pencil when it is slipped over the end, as shown in Fig. 6.

Both ends of spring B are sharpened, and bent so as to form projecting prongs *b*, as shown in Figs. 1, 3, and 7, or these points may be bent so as to form hooks *b'*, as represented in Figs. 2 and 6.

The wire forming the spring is slightly bent or indented at the top, as shown in Fig. 4, so as to form a catch, *a*, which, when the spring is slipped over the pencil, will fit into a notch, *c*, made in the top of the pencil for its reception. By this means the holder may readily be attached upon, or detached from, the pencil, which is prevented from slipping or falling out of it by the catch *a* and notch *c*.

From the foregoing description, taken in connection with Fig. 7, the method of fastening the pencil upon, or detaching it from, the coat or other garment will be readily understood.

When a holder with straight points or prongs is used, the pencil is attached to the inside lining of the coat by lifting the lapel with the left hand; then, with your right hand, which holds the pencil, stick the bottom point into the lining, or cloth, pull down a little, which draws the spring together, and then the other point will, when the hold upon the pencil is released, of itself spring into the cloth, which fastens the pencil securely in a vertical position. To detach it, the operation of fastening is simply reversed.

When hooks are used upon the ends of the spring, instead of prongs, the pencil is fastened to the coat by inserting the lower hook first, then pushing the pencil up through the spring a little, and slipping in the upper hook. In both cases, the operation of fastening or unfastening the pencil is only the work of a second.

Instead of having only one prong or hook at each end of the spring, there may be several, so that if one should break or otherwise become unserviceable the others may do the work.

The advantages of my improved holder are, that, when used, it prevents the losing or mislaying of the pencil, and also prevents breakage of the point, as when the pencil is carried in the pocket. It is readily attached to or detached from a garment without the least injury to it. It may be adapted to any size or kind of pencils or pencil-holders; and can be made so cheaply that one can be attached to each pencil by the pencil-manufacturer without adding

perceptibly to the cost thereof. Being secured permanently
507 upon the end of the pencil, it is not liable to be lost or mislaid, or to be left sticking to the coat, but is always at hand ready for use.

Having thus described my invention, I claim and desire to secure by letters patent of the United States—

The combination of the holder or fastener B, having prongs or hooks *b b'*, and catch *a*, with the pencil or pencil-case A, having notch *c*, substantially in the manner and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own invention I have hereto affixed my signature in presence of two witnesses.

EDWIN W. GROVE.

Witnesses:
R. W. DUNLAP.
WM. M. JANES.

509 UNITED STATES PATENT OFFICE.

LUCIUS DEMING, of St. Louis, Missouri, assignor of one-half his right to Cotton H. Allen, of same place.

Improvement in Horse-Collar Attachments.

Specification forming part of Letters Patent No. 198,191, dated December 18, 1877; application filed November 6, 1877.

To all whom it may concern:

Be it known that I, Lucius Deming, a resident of St. Louis, Missouri, have invented a new and useful anti-galling attachment for horse-collars, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making part of this specification, in which—

(Here follows diagram marked p. 508.)

Figure 1 is a perspective view, showing the invention in position; and Fig. 2, a cross-section of the collar and attachment.

Similar letters refer to similar parts.

By means of the present invention a horse-collar is effectually prevented from galling the neck of the horse. It consists, substantially, of a piece of leather or other suitable material, that is interposed between the collar and the animal's neck, and is shaped so as to be suspended from the collar, but in such manner as to be independent of the movement of the latter, and to remain stationary upon the neck.

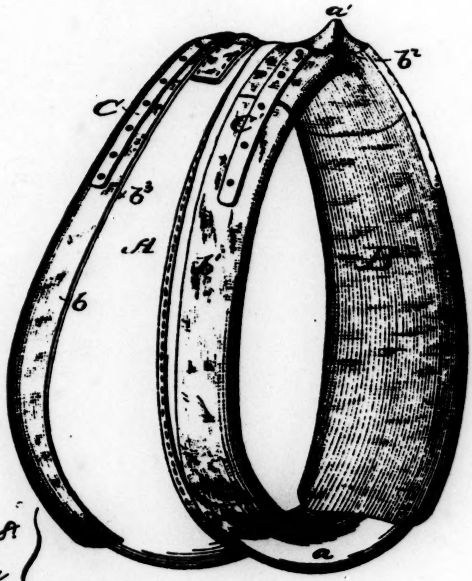
Referring to the annexed drawing, A represents an ordinary horse-collar. B represents the attachment. It consists, preferably, of a piece of leather, and extends entirely around the inside of the collar, saving at the throat *a*, and is provided with two crimps—one, *b*, that

L. DEMING. 508

Horse-Collar Attachment.

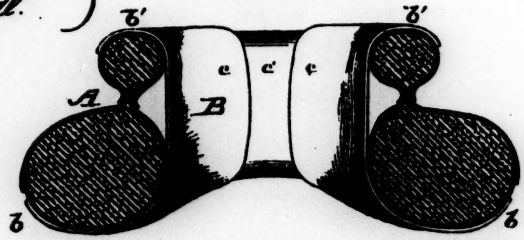
No. 198,191. Patented Dec. 18, 1877

FIG. 1.



No. 348 McClain v. Ortmayer et al. p. 508

FIG. 2.



ATTEST.

Saml. S. Boyd

Saml Bakewell

INVENTOR.

Lucius Deming

by Chas. D. Mosby,

his atty:

J. P. LINDSAY. 510

Safety-Pin.

No. 198,890. Patented Jan. 1, 1878.

Fig. 1.

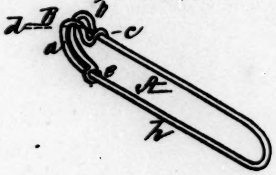


Fig. 2.

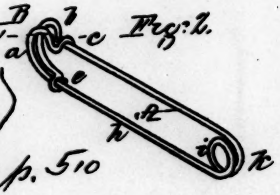


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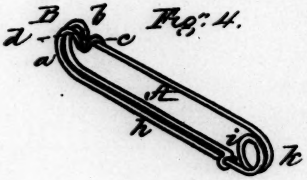
Fig. 3.

Fig. 4.



Witnesses,
W. J. Cambridge
J. E. Cambridge

Fig. 5.

Inventor,
John P. Lindsay,
per Teschemacher & Stevens,
Attorneys.

comes up over the afterwale or pad of the collar, and the other, b^1, that comes over the forewale or rib of the collar. The collar and attachment are not fastened to each other; but, by reason of the crimps b b^1, the attachment is supported in position. As the collar moves in use, it slides upon the attachment, while the latter remains in the same position upon the horse's neck. The neck is thus shielded from the wear of the collar. The attachment is readily attached to, and removed from, the collar by springing the crimps back. The crimp b^1 is preferably cut away at b^2, to provide for the projecting peak a', and also to facilitate the turning back of the crimp. To sustain the crimps properly in place when wet I preferably re-enforce them at C C', respectively.

The crimps b b^1 need not extend, in all cases, as far up and down upon the collar as is shown in the drawing. The lower portion of the crimp b—say from the point b^3 downward—may be omitted, and that part of the attachment may be allowed to flare from the collar. The attachment is preferably made in three pieces, c c c', the latter being in the neck of the collar.

I claim—

1. As an improved manufacture, the flexible crimped attachment B for horse-collars.

2. The combination of the collar A and the flexible crimped attachment B, substantially as described.

3. The combination of the collar A and the flexible crimped attachment B, provided with the re-enforces C C', substantially as described.

LUCIUS DEMING.

Witnesses:
CHAS. D. MOODY.
PAUL BAKEWELL.

511 UNITED STATES PATENT OFFICE.

JOHN P. LINDSAY, of Boston, Massachusetts.

Improvement in Safety-Pins.

Specification forming part of Letters Patent No. 198,890, dated January 1, 1878; application filed December 17, 1877.

To all whom it may concern:

Be it known that I, John P. Lindsay, of Boston, in the county of Suffolk and State of Massachusetts, have invented an improvement in safety-pins, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

(Here follows diagram marked p. 510.)

Figures 1, 2, 3, and 4 are perspective views (enlarged) of a safety-pin constructed in accordance with my invention. Fig. 5 is a transverse section through the same.

My present invention consists in a wire safety-pin made in one piece, and so bent as to form a shield, composed of two loops arranged side by side, and terminating in another loop, which forms a guard or socket for the point of the pin, the two loops arranged side by side being bent in the direction of the length of the pin, and constituting the outer portion of the shield, while the single loop, which receives the end of the pin and forms the inner end of the shield, lies in a plane transversely therewith, a safety-pin so constructed being readily shaped from one piece of metal, and having its point protected, and the shield made smooth, so as not to catch into the garment of or scratch the person who wears or applies it, and being entered at or removed from either side of the shield in a convenient and expeditious manner.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents my safety-pin, formed of a single piece of round wire, of brass, steel, or other suitable metal, bent around by a suitable implement, so as to form a double loop, *a b*, at one end of the pin, the two loops *a b* being arranged side by side, and parallel to each other, and lying in a direction with, or nearly with, the length of the pin, and the inner ends of these loops being again curved or bent in such manner as to terminate in another single loop, *c*, lying in a direction transversely with the pin, and forming a guard or socket for the point *d* of the pin, the two outer loops *a b*, which are arranged side by side, and the inner loop *c* constituting a shield, B, which presents no angular projections, and completely protects the point *d;* and, consequently, neither the shield nor point of the pin is liable to catch into the garment or scratch the person of the wearer or party applying the pin.

As the shield is open at both sides the pointed end of the pin may be readily entered at either side, and sprung into place within its socket *c* without the necessity of looking at the pin, as the unaided fingers are sufficient to manipulate it properly.

In Figs. 1 and 2 the extremity *e* of the wire opposite the point is bent or turned down upon or around the portion *h* just at the place where it commences to curve to form the loop *a*, this extremity *e* being the termination of the loop *b*.

The shield of the pin in Fig. 2 is exactly similar to that in Fig. 1, the only difference in the construction of the pin being that an extra bend or coil, *i*, is given the wire, Fig. 2, at the curved end *k* opposite the shield, for the purpose of increasing the strength of the spring, which keeps the pointed end in place within its guard or socket.

In Figs. 3 and 4, the identical form of shield is retained; but the extremity *e* of the wire, instead of being bent around and forming the termination of the loop *b*, is continued alongside and throughout the whole length of the portion *h* of the wire, and is bent down upon or around the curved end *k* opposite the shield, thus forming a double portion *h;* but as no change whatever is made in the

P. F. TUNNY.

Clasp.

No. 207,694. Patented Sept. 3, 1878.

No. 348.
McClain
v.
Ortmayer
Stat.
p. 573

Fig. 1.

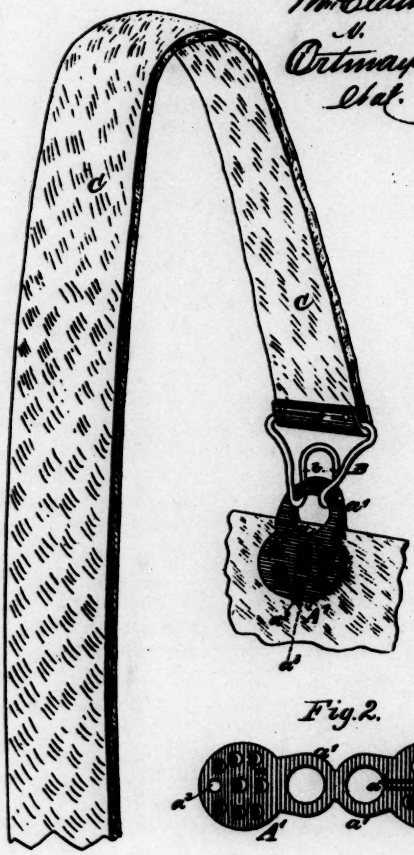
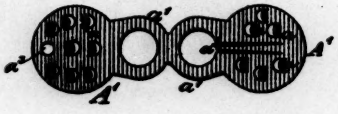


Fig. 2.



WITNESSES:

Henry N. Miller

P. Sedgwick

INVENTOR:

P. F. Tunny

BY Munn & Co

ATTORNEYS.

shape of the shield, this feature does not alter the spirit of my invention.

By providing the shield with a double loop the pin is re-enforced at the point where the greatest strength is required, thus enabling me to use smaller wire; and the shield cannot be straightened or drawn out of shape by an inexperienced person in attempting to release the point of the pin, which bending of the shield frequently occurs with many of the safety-pins as heretofore constructed.

512 What I claim as my invention, and desire to secure by letters patent, is—

A safety-pin formed of one piece of wire, and provided with a shield B, composed of two loops, *a b*, arranged side by side and terminating in a third loop, *c*, lying in a plane transversely therewith, and constituting the socket or guard for the point of the pin, substantially as described.

Witness my hand this 14th day of December, 1877.

JOHN P. LINDSAY.

In presence of—
N. W. STEARNS.
P. E. TESCHEMACHER.

514 UNITED STATES PATENT OFFICE.

PATRICK F. TUNNY, of Greenbush, New York.

Improvement in Clasps.

Specification forming part of Letters Patent No. 207,694, dated September 3, 1878; application filed January 31, 1878.

To all whom it may concern:

Be it known that I, Patrick F. Tunny, of Greenbush, in the county of Rensselaer and State of New York, have invented a new and improved clasp for suspenders, of which the following is a specification:

The object of my invention is to provide an improved clasp for suspenders for supporting pantaloons without the use of buttons.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

(Here follows diagram marked p. 513.)

In the accompanying drawing, figure 1 is a perspective view of a section of a suspender having my improved hook and clasp attached thereto. Fig. 2 is a detail view of the clasp.

A′ is a clasp, in which the ring a^1 is formed in one solid piece with it, while the clasp is clamped to the cloth by a tongue, a^2, (cut in one half of it,) that passes through the cloth and a hole, a^3, in the other half of the clasp, the tongue being then bent or clinched.

The hook B is made of one continuous wire, and the catch or loop

thereof is wider at *b* than the hole in ring a^1, thus giving it a lateral elasticity, so that it requires some force to insert and withdraw the loop in and from the ring a^1, thereby preventing it from slipping out accidentally. The rear of hook B is permanently secured to the suspender by being inserted in a U-shaped plate, E, clamped over the end of the strap C and fastened by rivets.

I am aware that a clasp and hook have been heretofore used in connection with buckles; but

What I claim is—

The combination, with hook B, of the clasp A′, made in one piece with the ring a^1 and provided with inner teeth or projections *a*, tongue a^2, and the hole a^3, for attaching it to pantaloons or other garments, substantially as shown and described.

PATRICK F. TUNNY.

Witnesses:
JOHN BOYLAN.
JNO. H. DEARSTYNE.

516 UNITED STATES PATENT OFFICE.

GEORGE A. DE ZENG, of Chicago, assignor of one-half his right to John D. De Veling, of Chebanse, Illinois.

Improvement in Horse-Collars.

Specification forming part of Letters Patent No. 208,516, dated October 1, 1878; application filed April 22, 1878.

To all whom it may concern:

Be it known that I, George Augustus De Zeng, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in horse-collars, of which improvements the following, in connection with the accompanying drawings, is a full, clear, and exact description.

(Here follows diagram marked p. 515.)

Figure 1 in the drawings is a front elevation of a horse-collar embodying my invention; Fig. 2, a side view thereof; Fig. 3 a section in the plane of the line *x x*, or of the upper end of one side of the collar; Fig. 4, a section in the plane of the line *y y*; Fig. 5, a perspective of one of the perforated nuts; Fig. 6, a perspective view of the lower end of the collar detached; and Figs. 7, 8, and 9 are perspective representations of the friction-clasp or buckle.

Like letters of reference indicate like parts.

The object of my invention is to render horse-collars easily adjustable in length and width, and to render various parts thereof adjustable, so that the same collar may be fitted with facility to horses having necks varying considerably from each other in size, and so that the tug-straps and other parts of the harness connected

thereof is wider at *b* than the hole in ring a^1, thus giving it a lateral elasticity, so that it requires some force to insert and withdraw the loop in and from the ring a^1, thereby preventing it from slipping out accidentally. The rear of hook B is permanently secured to the suspender by being inserted in a U-shaped plate, E, clamped over the end of the strap C and fastened by rivets.

I am aware that a clasp and hook have been heretofore used in connection with buckles; but

What I claim is—

The combination, with hook B, of the clasp A′, made in one piece with the ring a^1 and provided with inner teeth or projections *a*, tongue a^2, and the hole a^3, for attaching it to pantaloons or other garments, substantially as shown and described.

PATRICK F. TUNNY.

Witnesses:
JOHN BOYLAN.
JNO. H. DEARSTYNE.

516 UNITED STATES PATENT OFFICE.

GEORGE A. DE ZENG, of Chicago, assignor of one-half his right to John D. De Veling, of Chebanse, Illinois.

Improvement in Horse-Collars.

Specification forming part of Letters Patent No. 208,516, dated October 1, 1878; application filed April 22, 1878.

To all whom it may concern:

Be it known that I, George Augustus De Zeng, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in horse-collars, of which improvements the following, in connection with the accompanying drawings, is a full, clear, and exact description.

(Here follows diagram marked p. 515.)

Figure 1 in the drawings is a front elevation of a horse-collar embodying my invention; Fig. 2, a side view thereof; Fig. 3 a section in the plane of the line *x x*, or of the upper end of one side of the collar; Fig. 4, a section in the plane of the line *y y*; Fig. 5, a perspective of one of the perforated nuts; Fig. 6, a perspective view of the lower end of the collar detached; and Figs. 7, 8, and 9 are perspective representations of the friction-clasp or buckle.

Like letters of reference indicate like parts.

The object of my invention is to render horse-collars easily adjustable in length and width, and to render various parts thereof adjustable, so that the same collar may be fitted with facility to horses having necks varying considerably from each other in size, and so that the tug-straps and other parts of the harness connected

to the collar may be properly adjusted. I also aim to improve the construction and operation of horse-collars in the several other respects hereinafter set forth, thereby adapting them either to light or heavy work, and rendering them strong, durable, light, cheap, and suitable for either light or heavy work, as well as ornamental in appearance, all of which will be hereinafter more particularly described.

In the drawings, A represents the body of the collar. I make this part in two pieces or sections, approximating the form of pads, of ordinary soft or stuffed collars. I deem it best to make the body A of wood, paper, or other hard material, so that the parts to be applied to it may be fastened thereon by means of screws.

B is a pad, provided with a check-rein hook, *a*, and a breeching-loop, *b*. Two arms, *c c*, extend laterally from the pad B, and terminate at their lower ends in the eyes *c' c'*. C C are metallic straps, the upper ends of which are hooked or linked into the eyes *c' c'*, and in the lower ends of which are perforations *d d*, arranged one above the other. On the upper ends of the sections of the body A are the metallic strips D D, which are raised centrally and longitudinally above the sections to which they are applied, so as to form pockets or recesses, into which the lower ends of the straps C C may be pushed.

E E are the rein-rings. These rings pass through eyes in the heads of the screw pins or bolts E' E', and the inner or screw-threaded ends of the bolts E' E' pass through the raised parts of the strips D D, through one of the perforations *d d*, and into a nut, *e*, resting in a pocket in the body A.

The pad B, by being linked, as shown and described, to the upper ends of the straps C C, is thereby rendered capable of rocking as the horse moves his neck up or down, and is thus prevented from chafing the neck. The pad may also be raised and lowered by raising and lowering the straps C C and passing the rein-bolts through different perforations *d d*, thus altering the length of the collar and widening or decreasing its width according to its length.

F and F' are ferrules on the lower ends of the sections of the body A. These ferrules extend considerably beyond the ends of the parts to which they are applied, and the ferrule F is grooved on its under or outer side, as shown at *f*. G is a lever, pivoted in the groove *f*. The ferrule F' is hollow, and adapted to receive the projecting end of the ferrule F. The ferrule F' is also grooved and perforated, as shown at *g*, and the outer end of the lever G is bent to enter the perforations *g g*. By depressing the upper or rear end of the lever G and pushing the ferrule F into the ferrule F', the bent end of the lever, when the rear end thereof is released, will enter a perforation or eye, *g*, and the lower ends of the sections of the body A will thus be attached or connected firmly to each other, a spring, *h*, holding the lever in the hole, which its bent end engages. The lower ends of the sections of the body A may be easily separated by depressing the upper or rear end of the lever G until the opposite end is disengaged, and the width of this part of the collar may be varied by causing the bent end of the lever to enter any of the

holes *g g*, according to the width which may be desirable or necessary.

517 H H are the pole-strap rings, and H′ H′ are nuts resting in mortises in the body A. The nuts H′ H′ are elongated, and *h′ h′* are perforations arranged longitudinally therein. I I are metallic pockets or caps, rigidly fastened to the body A, and arranged directly over the nuts H′ H′. The caps or pockets I I are perforated or slotted longitudinally, as shown at *i i*, and also slotted at the sides or edges, as shown at *i′ i′*. J J are slides arranged in the parts I I. K K are the bolts or screw-pins in which the rings H H are hung. The bolts K K pass through the slots *i i*, through the slides J J, and into any of the perforations *h h*, which are screw-threaded to receive the bolts K K. L L are draft-hooks, also perforated to receive the bolts K K. The hooks L L are applied to the body A by arranging their perforated ends in the parts I I, the said ends entering the slots *i′ i′*. The bolts K K may then be passed through the holes in the inner ends of the hooks L L, and secured by being screwed into the nuts H′ H′. By this means the draft-hooks may be set either high or low, as may be desired. To effect this adjustment, the bolts K K are only to be placed in a higher or lower perforation or female screw, *h′*, as may be necessary. Instead of the hooks L L, friction-clasps or wedge-buckles may be employed, the latter being adapted to enter the parts I I and to receive the bolts K K.

Figs. 7, 8, and 9 represent a friction-clasp or buckle now in use, and adapted, by means of the leaf or extension *k*, hinged thereto, to be employed in the place of the hooks L L. M M are the breeching-strap rings.

It will be perceived from the foregoing description that the construction and arrangements of parts described render the collar and draft adjustable, and that a combined collar and hame (or parts serving their functions) is thus produced.

A light or thin pad, N, may be applied to the collar, if thought desirable.

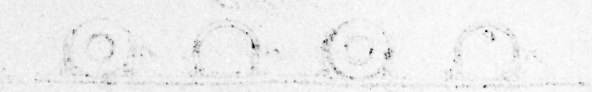
Having thus described my invention, what I claim as new, and desire to secure by letters patent, is—

1. The tilting pad B, when arranged between and pivoted laterally to the rigid side sections of a horse-collar, substantially as and for the purposes specified.

2. The vertically-adjustable straps C C, in combination with the tilting pad B, the said pad pivoted laterally to the said strips, all arranged substantially as specified with relation to each other and the body of a horse-collar, for the purposes set forth.

3. The body A of a horse-collar made in sections, the lower ends of the sections being adjustably connected by means of the hooked or bent lever G, pivoted to one of the said ends, and the perforated ferrule F′, applied to the other of the said ends, substantially as and for the purposes specified.

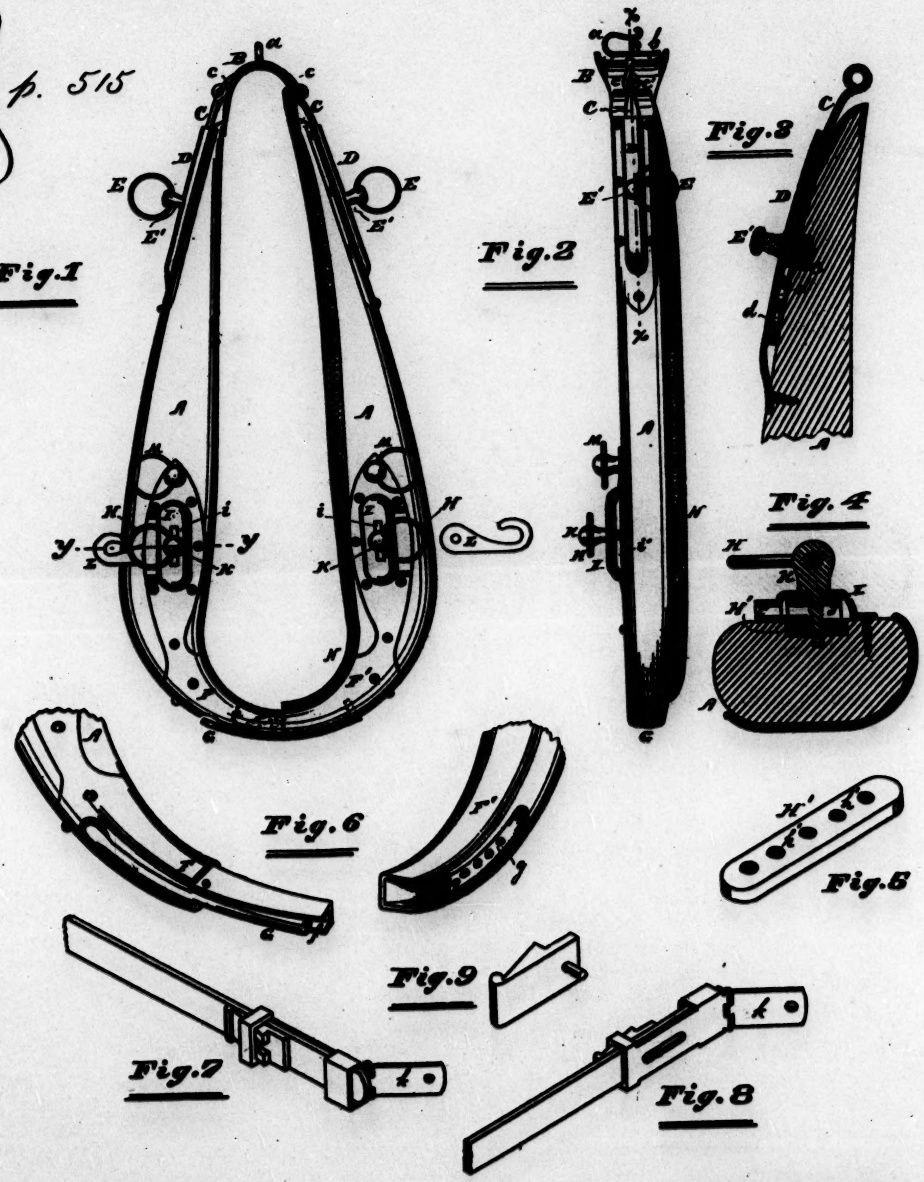
4. The combination of the removable bolts K K, the elongated and perforated nuts H′ H′, and the caps or pockets I I, the latter applied to a horse-collar, and all operating together in connection



G. A. De ZENG.
Horse-Collar.

No. 208,516. Patented Oct. 1, 1878.

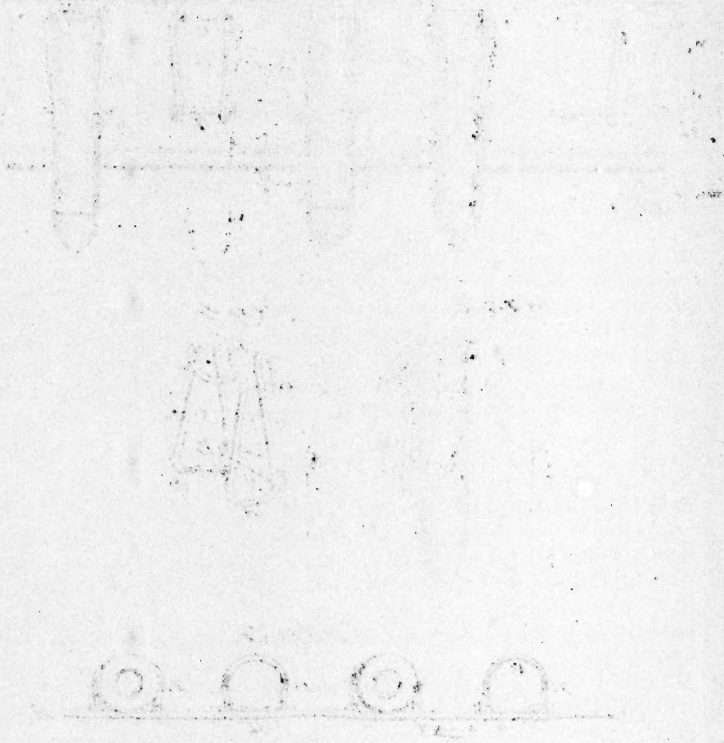
No. 348.
McClain
&
Ortmayer
et al.
p. 515



Attest:
J. F. Olmstead
Charles H. Schoff

INVENTOR:
George Augustus de Zeng
By Coyne & Co. his
Attorneys.

515



E. SCHAUB.

Cartridge Belt and Holder.

No. 220,550. Patented Oct. 14, 1879.

No. 348.
McClain
v.
Ortmayer
et al.
} p. 518

Fig. 1.

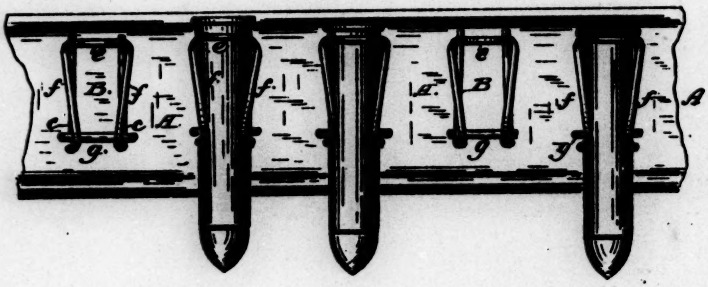


Fig. 2.

Fig. 4.

Fig. 3.

Witnesses
Ed. G. Dutinck
C. F. Petersen

Inventor
Edward Schaub
by Louis Bagger & Jr
Attorneys

therewith and with each other, substantially as for the purposes specified.

5. The combination of the body A, made in sections, the pad B, the adjustable straps C C, carrying the pad B and applied to the upper ends of the sections of the body A, the lever G, applied to the lower end of one of the sections, and the perforated ferrule F′, applied to the lower end of the other section, all substantially as and for the purposes specified.

GEORGE AUGUSTUS DE ZENG.

Witnesses:

F. F. WARNER.
JAMES H. COYNE.

519

UNITED STATES PATENT OFFICE.

EDWARD SCHAUB, of Chicago, Illinois.

Improvement in Cartridge Belts and Holders.

Specification forming part of Letters Patent No. 220,550, dated October 14, 1879; application filed August 11, 1879.

To all whom it may concern:

Be it known that I, Edward Schaub, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in cartridge belts and holders; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

(Here follows diagram marked p. 518.)

Figure 1 is a front view of a part or section of a cartridge-belt provided with my improved holder. Fig. 2 is a cross-section of the belt, showing the holder in side elevation. Fig. 3 is a top view of section of belt and holder, and Fig. 4 is a perspective view of the holder detached from the belt.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to cartridge-holders of that class that are affixed to belts and the cartridges inserted into said holders on the outside of the belt; and it consists in the construction of a wire holder provided with hooks for its permanent attachment to the belt, substantially as hereinafter more fully set forth.

In the drawings, A is the belt, which may be made of leather, rubber, canvas, or any other suitable flexible material. B is the holder, which consists of a piece of wire bent so as to form two pointed hooks, *b b*, two parallel parts, *c c*, then bent at or about right angles, as shown at *d d*, and then bent upward again and inwardly

toward the belt, when the middle part of the wire forming the holder is bent outward in a semicircle from the belt, as shown by the letter *e* in the drawings.

This construction of the holder gives the requisite spring to the inwardly-bent parts *f f*, to enable them to force the upper semicircular rim, *e*, in under the rim of the cartridge, as shown in the drawings, so as to hold it tight and prevent it from slipping out. At the same time the cartridge may be easily withdrawn from the belt and holder when desired for use.

The lower part of the holder is secured by a staple, *g*, to the belt or band, the said staple straddling the two arms *c c* at the point where they are bent at right angles to form the projecting arms *d d*.

Having thus described my invention, I claim and desire to secure by letters patent of the United States—

1. A cartridge-holder consisting of a section of wire or a flexible metal strip bent to form hooks *b b*, straight parallel parts *c c*, projecting arms *d d*, and inwardly-bent arms *f f*, curved to form the bail *e*, substantially as set forth.

2. The belt A, provided with the cartridge-holders B, consisting each of a section of wire or a flexible metal strip bent to form hooks *b b*, straight parallel parts *c c*, projecting arms *d d*, and inwardly-bent arms *f f*, curved to form the bail *e*, substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

EDWARD SCHAUB.

Witnesses:
ALBERT C. STAYART.
SIMON PETER BLUMENTHAL.

521 UNITED STATES PATENT OFFICE.

JOEL JENKINS, of Mount Vernon, New York.

Eyeglass-Hook.

Specification forming part of Letters Patent No. 231,051, dated August 10, 1880; application filed April 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, Joel Jenkins, of Mount Vernon, county of Westchester, and State of New York, have invented a new and improved sustaining-hook for eyeglasses, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification:

This invention is in the nature of an improvement in sustaining-hooks for eyeglasses, &c.; and the invention consists in a sustaining-hook for eyeglasses in combination with a pin, the hook and pin being formed from the same piece of wire and having a twisted shank.

(No Model.)

J. JENKINS.

520

Eyeglass Hook.

No. 231,051. Patented Aug. 10, 1880.

Fig: 1.

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McClain
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Ortmayer
et al.
p. 520.

Fig: 2.

Witnesses:
Chas. Neal.
H.C. Hattenberg

Inventor:
Joel Jenkins
by Geo. E. Lyon & Son
Attorney.

In the accompanying sheet of drawings—

(Here follows diagram marked p. 520.)

Figure 1 represents a perspective view of my invention with the hook, pin, and shield made from one piece of wire; Fig. 2, a perspective view with a hook and pin made from one piece of wire, and shield from a separate piece of metal.

Similar letters of reference indicate like parts in both figures.

A represents a hook designed for holding the eyeglass of the wearer to his person; and it is constructed of any suitable wire, and of any desired size, by doubling the wire in the middle of its length to form the end *a* of the hook, extending the two sides of the wire parallel to form the front *b*, twisting the wires together, forming the back *c* of the hook, branching the wires, as at *f f'*, to the right and left of the upper portion of the twisted part *c*, making a coil, *d*, in the branch *f*, and extending the wire *f*, after it is coiled to make the spring *e*, parallel with the branched portions *f f'*, and sharpening the end of this wire, thereby forming the pin *g*. The other branched portion, *f'*, of the wire is folded either into a shield, *i*, for the point of the pin, or folded so that a shield, *j*, Fig. 2, may be attached to it.

In Fig. 1 the shield and pin and hook are all formed from one piece of wire. In Fig. 2 the shield is of separate construction and attached to the wire. Either of these methods may be employed for forming the shield, and either of them will be found to produce a satisfactory result.

By combining the hook and the pin together, and employing wire of different sizes, the device may be used to sustain articles other than eyeglasses.

To use the device hereinbefore described, it is simply necessary to insert the pin *g* into the garment in any desired position, insert the point of the pin within the shield *i* or *j*, and the device is ready for use. By twisting the shank *c* of the hook it is rendered stiffer and better able to resist strain.

Having now described my invention, what I claim as new, and desire to secure by letters patent, is—

As an improved article of manufacture, the herein-described eyeglass-hook, composed of a hook formed from a wire doubled and twisted, a spring-pin made from a continuation of said wire, and a shield, all constructed and arranged as shown.

JOEL JENKINS.

Witnesses:
H. L. WATTENBERG.
WILLIAM ANDERSON.

523 UNITED STATES PATENT OFFICE.

JOHN T. STOLL, of Sacramento California.

Horse-Collar Pad.

Specification forming part of Letters Patent No. 236,857, dated January 18, 1881; application filed December 17, 1880. (Model.)

To all whom it may concern:

Be it known that I, John T. Stoll, of the city of Sacramento, State of California, have invented a new and useful improvement in horse-collar pads, of which the following is a specification.

The invention relates to that class of harness-collars which are made to open at the top when they are put on or taken off of the horse or animal.

The advantages of the open-top collar over those that are made solid are, that they are more easily put on or taken off, and as they are strapped together at the top they can be tightened so as to fit different animals, or to fit an animal while either in a fat or lean condition.

Heretofore such collars have been constructed so as to be held together at the top by means of straps and buckles drawn over the top of the collar, which is objectionable, owing to the flexibility and stretch of the straps, allowing the collar to twist and change form, and also in the fact that the strain put upon the hame-strap causes it to press down in the collar and hurt the animal's neck; and, secondly, the hames that are worn outside of the collar are kept in position by being tightly strapped around the collar, which is objectionable, owing to the straps working slack and the collar changing form by the strain put upon it, so that the hames are liable to work loose and fall forward and off the collar.

The object of my invention is to provide an upper pad of such a form and of such material as to securely keep the collar in its proper shape, and also keep the strap that holds the hame together from pressing through the top of the collar; and, secondly, in providing the upper pad with a hook or holding-iron that will prevent the upper hame-strap from working forward, and thus keep the hames in their place on the collar.

The invention consists of a pad composed of stiff material, such as one or more thicknesses of leather of about the width of the collar, and formed so as to exactly fit over the top of the same, and to be stiff enough so that when it is held in its place by the strap that holds the top parts of the collar together it will prevent the collar from twisting or changing form; and, secondly, in providing the pad with a hook or holding-iron that will prevent the hame-strap from working forward, and thus keep the hames from coming off.

(Here follows diagram marked p. 522.)

(Model.)

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J. T. STOLL.
Horse Collar Pad.

No. 236,857. **Patented Jan. 18, 1881.**

No. 348.
McClain
v.
Ortmayer
et al.
p. 522

Fig. 1.

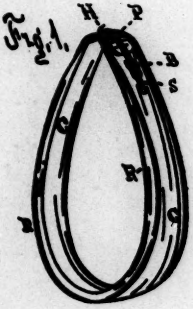


Fig. 2.

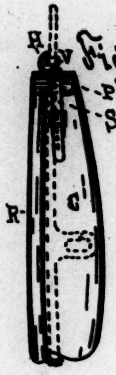


Fig. 3.

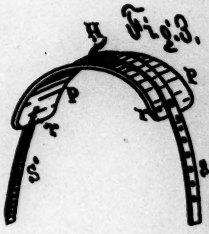


Fig. 4.

Witnesses,
Peter Bohl
Frank G. Waterhouse.

Inventor
John T. Stoll
per. Atty
A. S. Waterhouse

In the accompanying drawings, figure 1 is an isometrical view of the harness-collar with pad and holding-iron embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a detail view of the pad and hook. Fig. 4 is a detail view of the hook or holding-iron.

In Figs. 1 and 2 are shown a common form of harness-collar, consisting of the rim R and body C, provided with the stiff top pad, P, and hook H, which are held down in place by the strap S, used to tighten the top ends of the collar together, the pad P being made about the width of the collar, and formed so as to fit closely to the top of the collar, so that by its form and stiffness it will prevent the collar from twisting or being drawn out of shape, the pad also preventing the hame-strap V from pressing in the collar and hurting the neck of the animal. The pad P is secured to the collar by means of the strap S, which is secured to one side of the collar and brought over the pad P and tightly buckled or secured to the other side of the collar, thus holding the two sides of the collar together and the pad P in its place, while the pad prevents the strap V from pressing in the collar.

In order to have the pad properly adjusted on top of the collar, it is riveted or secured to the strap S at *r r*, so that when the collar is to be strapped together the pad P will swing down in its place. In about the middle of pad P is riveted a hook or holding-iron, H, which, by reference to Fig. 2, will be seen secured to the pad P under the strap S, and so formed as to prevent the hame-strap V, which crosses the top and holds the hames around the collar, from working forward and off the collar.

Fig. 3 shows pad P, which can be composed of one or more thicknesses of material, and is secured to the strap S, and provided with the holding-iron H.

Fig. 4 shows a holding-iron, which is provided with rivet-holes for securing the same to the pad P, as above shown.

I do no not confine myself to any particular form of iron
524 H, the object of which being to extend up from the pad P, so as to prevent the strap that holds the hames from working forward.

It will be seen, by reference to the drawings, that the pad P is made square, or nearly so, the width and length being about equal, the corners of which are rounded, the object of forming the pad square being to present a wide surface for the hame-strap to rest upon, so that it will be prevented from working forward and off the pad, as the hame-straps get tighter as they work toward the forward edge—a fact which causes them to keep in the middle of the pad P.

What I claim as my invention is—

The solid pad P, composed of one or more thicknesses of leather without stuffing, provided with the hook H and straps S, in combination with the collar having a buckle, the said pad and hook arranged so that the former shall securely hold the collar together, and the latter keep the hames in place, substantially as set forth.

JOHN T. STOLL.

Witnesses:
PETER BOHL.
FRANK G. WATERHOUSE.

526 UNITED STATES PATENT OFFICE.

HUBERT L. JUDD, of Brooklyn, New York.

Curtain-Hook Pin.

Specification forming part of Letters Patent No. 254,983, dated March 14, 1882; application filed January 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, Hubert L. Judd, of Brooklyn, in the county of Kings and State of New York, have invented an improvement in curtain-hook pins, of which the following is a specification.

Shield-pins have been made of a single piece of wire pointed at one end and bent with a spring-coil, and having at the other end a shield receiving the point. With pins of this general character a hook has been employed, so that the pin may be run into the folds of the curtain and the hook used to connect the curtain to the suspending ring or hook of the cornice. In some instances the hook has been made of the same wire as the rest of the pin. In other cases the hook has been a separate piece of metal.

My invention relates to a shield pin and hook combined, in which the hook is made of the same wire as the pin, and there is a metal clamp that connects the wires at their bends where the hook branches out from the body of the pin, thereby preventing the metal in the body becoming bent at the junction of the same with the hook.

This improvement facilitates the construction of the combined hook and pin, because the wires are simply bent to shape, and none of the parts are twisted together, and the metal is stiffened and the wires kept in line at the body of the pin.

(Here follows diagram marked p. 525.)

In the drawings, figure 1 is a perspective view of the pin and hook complete. Fig. 2 represents the piece of sheet metal that forms the clamp, and Fig. 3 is a section of the parts at the line *x x*.

The pin portion *a*, coil *b*, and shield *c* are of any of the well-known forms in shield-pins. The body *e* is not continuous, as in shield-pins, but the wire is bent off double at right angles, or nearly so, and formed into a hook, *i*, that is adapted to engage with a cornice-ring, or with a tenter-hook or other support for the curtain. If these parts only were used, the body *e* would not be sufficiently rigid, as the wire would be liable to spring and bend at the junction of the hook and body. To prevent this I combine with the pin and hook a sheet-metal clamp, *f*, that is wrapped around the wires at the junction of the hook and body, so as to stiffen the parts and make the pin and hook firm and strong.

The edge of the strip may be notched, as shown, for the wire of

(No Model.)

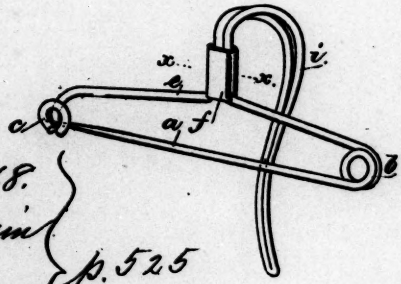
H. L. JUDD.

525

CURTAIN HOOK PIN.

No. 254,983. Patented Mar. 14, 1882.

Fig. 1.



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et al.
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Fig. 2.

Fig. 3.

Witnesses
Harold Sewell
J. Hall

Inventor
per Hubert L. Judd.
Lemuel W. Serrell
atty

(Model.)

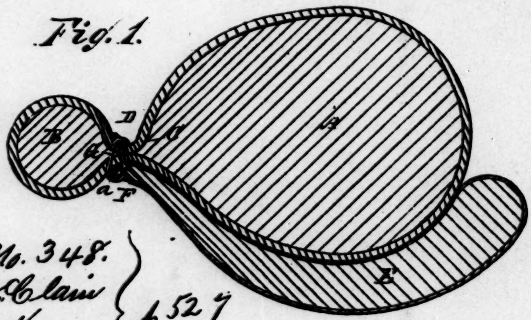
527

G. P. COLE.

HORSE COLLAR.

No. 256,977. Patented Apr. 25, 1882.

Fig. 1.



No. 348.
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et al.
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Fig. 2.

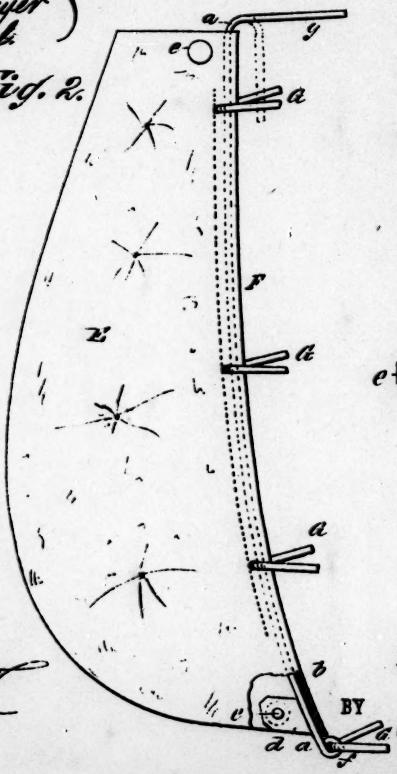
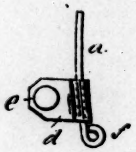


Fig. 3.



WITNESSES:

Theo. G. Hostrup
C. Sedgwick

INVENTOR:

G. P. Cole

BY Munn & Co

ATTORNEYS

the body, and the metal of the strip is compressed at this edge so as to grasp the said wire.

It will be evident that the shield-pin and hook, although formed of one piece of wire, are subject to considerable strain, both in the act of pushing the pin into the curtain and in suspending that curtain by the hook, and that the two portions of the body are kept in line with each other by the sheet-metal clamp *f*, so as to be rigid and not liable to be displaced by the strain to which they are subjected.

I claim as my invention—

In a curtain hook and pin made of one piece of wire, the combination, with the shield-pin and curtain-hook, of a metal clamp surrounding the wire at the junction of the hook and body of the shield-pin, substantially as specified.

Signed by me this 7th day of January, A. D. 1882.

H. L. JUDD.

Witnesses:
GEO. T. PINCKNEY.
WILLIAM G. MOTT.

528 UNITED STATES PATENT OFFICE.

GEORGE P. COLE, of Johnstown, New York, Assignor of one-fourth to Potter Hadden, of same place.

Horse-Collar.

Specification forming part of Letters Patent No. 256,977, dated April 25, 1882; application filed March 9, 1882. (Model.)

To all whom it may concern:

Be it known that I, George P. Cole, of Johnstown, Fulton county, New York, have invented a new and useful improvement in horse-collars, of which the following is a full, clear, and exact description.

The invention consists of an improved method of attaching sweat-pads to horse-collars, the object of which is to secure them more substantially and permanently than can be done by the common method of sewing them on, all as hereinafter more fully described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

(Here follows diagram marked p. 527.)

Figure 1 is a transverse section of one side or member of a collar and a sweat-pad attached according to my improved method. Fig. 2 is a side elevation of a sweat-pad with a part cut away, illustrating the contrivance by which I connect the pad to the collar; and Fig 3 is a detail of some of the attaching devices.

A represents the collar proper; B, the rim thereof, beyond the

crease or groove D, for the hames; C, the thin web between said rim and collar, to which the pad E is commonly attached by sewing the thin edge F of said pad thereto; but it is a very unsatisfactory method of connection, very soon destroyed by tearing out, the thread soon rotting by the heat and sweat of the animal. I therefore propose to "cord" the edge of the pad with wire *a*, and secure said wire at each end against tearing through the web *b*, by which it is bound by metal clips *d*, placed inside of the web of the case of the pad and secured by rivets *e*. Then I apply the wire staples G, as shown, along the pad at suitable intervals, from end to end, by inserting them back of the wire, which staples I pass through the thin web C of the collar, and clinch their ends, as shown in Fig. 1, to attach the pad, and thus secure it very firmly. At the lower end of the pad I also make an eye, *f*, in the wire *a*, which extends out of the end of the pad, and connect that to the collar by a staple also. The upper end of the wire-projects, as at *g*, to be itself passed through the collar and clinched, thus making a very substantial connection; also one that may be quite as readily made as the old one.

To prevent the staples from escaping before attaching the pad, they are pinched together after being inserted sufficiently to retain them while the pad is unattached.

Having thus described my invention, I claim as new and desire to secure by letters patent—

1. The sweat-pad corded with wire *a*, and provided with wire staples G, as means for attaching the pad to the collar, substantially as specified.

2. The combination, with the sweat-pad and collar, of the wire *a*, bound in the edge of the sweat-pad, and having an eye-extension, *f*, at the lower end, and a point-extension, *g*, at the upper end, for connection with said collar, substantially as specified..

3. The combination of wire *a*, clips *d*, rivets *e*, pad E, staples G, and collar A B C, substantially as specified.

4. The sweat-pad constructed with the wire at its edge end for attachment to the collar, substantially as specified.

GEORGE P. COLE.

Witnesses:
PHILIP KECK.
ROBERT HUMPHRY, JR.

530 UNITED STATES PATENT OFFICE.

HENRY R. HEYL, of Philadelphia, Pennsylvania.

Suspension Device.

Specification forming part of Letters Patent No. 264,947, dated September 26, 1882; application filed June 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, Henry R. Heyl, a citizen of the United States, residing in the city and county of Philadelphia, State of

(No Model.)

529

H. R. HEYL.

SUSPENSION DEVICE.

No. 264,947. Patented Sept. 26, 1882.

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Stat.
p. 529

Fig. 1.

Fig. 2.

Fig. 3.

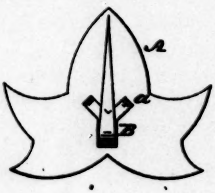


Fig. 4.

WITNESSES:

J. D. Grant,
H. F. Fischer

INVENTOR:

Henry R. Heyl,
By John A. Diedershein
ATTORNEY.

Pennsylvania, have invented a new and useful improvement in suspension-hooks, which improvement is fully set forth in the following specification and accompanying drawings, in which—

(Here follows diagram marked p. 529.)

Figures 1 and 3 are face views of suspension-hooks embodying my invention. Fig 2 is a rear view of Fig. 1. Fig. 4 is a vertical section in line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention has for its object a suspension-hook which may be easily and conveniently affixed to a wall or other desired locality without the employment of tacks, screws, or other similar means.

The invention consists in constructing the article of a plate or support of pliable material, to which is secured a hook, stud, or equivalent piece having a forked or bifurcated end, said piece projecting from the front face of the support, and the back of the support having a coating of glue, mucilage, or other adhesive material by which it may be attached in position, it being found that the said piece has a secure connection with the support, and is capable of enduring considerable strain without liability to turn or be torn from the support to which it is fastened by the bifurcated end, as above stated.

Referring to the drawings, A represents a plate or support, and B a hook, stud, or equivalent suspension-piece attached to the front face of said support so as to project therefrom. The support A is formed of paper, paper re-enforced by fabric, or other suitable flexible or pliable material, cut or pressed into shape, and the back of the support is coated with glue, mucilage, or other suitable adhesive substance. The piece B has the end which is attached to the support A bifurcated, as at *a*, the bifurcation being passed through the support and clamped thereupon, thus making at least two places of attachment of the piece with the plate. The piece B, when of the form of a hook, may be constructed of wire, sheet metal, &c.

It is possible to make the plates or supports A of a great variety of forms and shapes, and they may be made to represent, by embossing, printing, coloring, &c., flowers, leaves, and other objects, and, if desired, the piece B may be pointed, and thus be serviceable as a bill-file, a great variety of designs being comprehended in my invention, the bifurcation *a* being preserved in each case.

It will be seen that by means of the coating on the back of the support A the latter may be made to adhere to a wall or other locality. The projecting suspension-piece B provides convenient means of hanging pictures, &c., and said piece, owing to the secure connection with the support afforded by the bifurcated end *a*, is prevented from turning or being torn from position, as said end takes hold of the support at, at least, two distinct places. Furthermore, the entire device may be easily constructed, and is simple and inexpensive.

I am aware that it is not new to form a suspension-hook of a support having its back coated with adhesive substance and a hook or

knob secured to the support so as to project in front thereof, and therefore do not claim the same; but,

Having fully described my invention and the advantages thereof, what I do claim as new, and desire to secure by letters patent, is—

The improved suspension-hook consisting of a support having a connected suspension-piece in front and a coating of adhesive substance on the back, said suspension-piece having a bifurcated end, by which it is secured to the support, substantially as and for the purpose set forth.

HENRY R. HEYL.

Witnesses:

JOHN A. WIEDERSHEIM.
F. COOPER.

532 UNITED STATES PATENT OFFICE.

ALPHONSE T. CWERDINSKI, of St. Louis, Missouri.

Pencil-Holder.

Specification forming part of Letters Patent No. 289,392, dated December 4, 1883; application filed March 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, Alphonse T. Cwerdinski, of St. Louis, Missouri, have made a new and useful improvement in pencil-holders, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

(Here follows diagram marked p. 531.)

Figure 1 is a view in perspective of the improved holder containing a pencil; Fig. 2, a view in perspective of the holder, the view being from the rear; Fig. 3, a horizontal longitudinal section, and Fig. 4 a view showing the blank from which the holder is made.

The same letters denote the same parts.

This invention is an improved form of that class of pencil-holders which in use are attached to the vest, pants, or elsewhere upon the clothing of the user. As such holders have hitherto been made, the pencil has been inserted by introducing it endwise into the holder—that is, the point of the pencil is brought over the holder, and then the pencil is moved downward into the holder. This mode is objectionable, in that it requires especial attention on the part of the person using the pencil to bring the pencil-point into position above the holder.

To provide a holder to which a pencil can be more readily attached is the aim of this improvement, which consists, substantially, as follows:

A represents a plate or bar, which is held against the clothing of

(No Model.)

A. T. CWERDINSKI.

PENCIL HOLDER.

No. 289,392.

Patented Dec. 4,

Fig. 1.

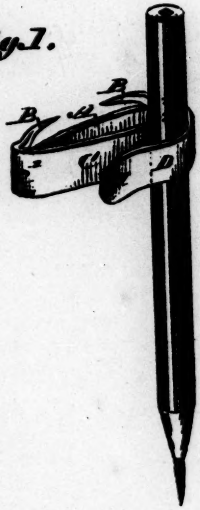
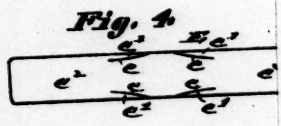


Fig. 2.

Fig. 4.



No. 3
McClan
M
Ortmay
et al.

Fig. 3.

Attest:
Charles Pickles
Robt. S. Pope

Inventor,
Alphonse T. Cw
by C D Moore

knob secured to the support so as to project in front thereof, and therefore do not claim the same; but,

Having fully described my invention and the advantages thereof, what I do claim as new, and desire to secure by letters patent, is—

The improved suspension-hook consisting of a support having a connected suspension-piece in front and a coating of adhesive substance on the back, said suspension-piece having a bifurcated end, by which it is secured to the support, substantially as and for the purpose set forth.

HENRY R. HEYL.

Witnesses:
JOHN A. WIEDERSHEIM.
F. COOPER.

532 UNITED STATES PATENT OFFICE.

ALPHONSE T. CWERDINSKI, of St. Louis, Missouri.

Pencil-Holder.

Specification forming part of Letters Patent No. 289,392, dated December 4, 1883; application filed March 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, Alphonse T. Cwerdinski, of St. Louis, Missouri, have made a new and useful improvement in pencil-holders, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

(Here follows diagram marked p. 531.)

Figure 1 is a view in perspective of the improved holder containing a pencil; Fig. 2, a view in perspective of the holder, the view being from the rear; Fig. 3, a horizontal longitudinal section, and Fig. 4 a view showing the blank from which the holder is made.

The same letters denote the same parts.

This invention is an improved form of that class of pencil-holders which in use are attached to the vest, pants, or elsewhere upon the clothing of the user. As such holders have hitherto been made, the pencil has been inserted by introducing it endwise into the holder—that is, the point of the pencil is brought over the holder, and then the pencil is moved downward into the holder. This mode is objectionable, in that it requires especial attention on the part of the person using the pencil to bring the pencil-point into position above the holder.

To provide a holder to which a pencil can be more readily attached is the aim of this improvement, which consists, substantially, as follows:

A represents a plate or bar, which is held against the clothing of

(No Model.)

531

A. T. CWERDINSKI.

PENCIL HOLDER.

No. 289,392. Patented Dec. 4, 1883.

Fig. 1.

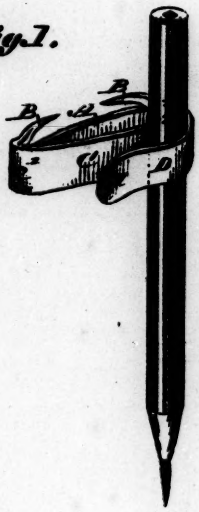


Fig. 2.

Fig. 4.

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v.
Ortmayer
et al.
p. 531

Fig. 3.

Attest:
Charles Pickles
Robt. S. Pope

Inventor:
Alphonse T. Cwerdinski
by C D Moody
atty.

the wearer by some suitable means, and preferably by means of the prongs B B B B, which are stuck into the clothing, and thereby serving to fix the holder in the desired place.

C represents a spring plate or bar in front of the plate A, and at one end attached thereto.

D represents a lip extending from the end *a* of the plate A outward past the free end *c* of the plate C, and then extending in front of the plate C, with its end *d* free. The pencil is attached by passing it sidewise between the plate C and the free end of the plate D and into the position shown in Fig. 1, in which position it is held by the lateral pressure of the plates C D. The extreme end of the plate D is preferably bent outward somewhat, and also the end *c'* of the plate C turned inward somewhat, and all substantially as shown, to facilitate the inserting of the pencil.

The holder in practice is a single integral plate bent to form the various parts A B C D, substantially as described, and it can be very readily made from a blank, E, Fig. 4. The lines *e e e e* are slits in the blank, and the prongs B B B B are formed from the portions *e' e' e' e'* of the blank. The part C is formed by turning over the end e^2, and the part D by turning over the end e^3.

So far as holding a pencil is concerned, the parts A and D may be used without the intermediate part, C; but to adapt the holder to a greater variety of pencils it is desirable to employ the part C. When only the parts A and D are used, one or both of them should be of springy material.

I claim—

The herein-described pencil-holder, the same consisting of the plate A C D, bent as described, the part A of said plate having the prongs B B B B, substantially as described.

A. T. CWERDINSKI.

Witnesses:

C. D. MOODY.

CHARLES PICKLES.

533 17269.

DOMINION OF CANADA.

To all to whom these presents shall come:

Whereas Edward McClain, of Greenfield, Ohio, United States of America, harness-maker, has petitioned the commissioner of patents praying for the grant of a patent for alleged new and useful improvements in pads for horse collars, a description of which invention is contained in the specification, of which a duplicate is hereunto attached and made an essential part hereof, and has elected his domicile at Ottawa, Ontario, in Canada, and has also complied with the other requirements of the patent act of 1872 and acts amending the same:

Now, therefore, the present patent grants to the said Edward McClain, his executors, administrators, legal representatives, and assigns,

for the period of fifteen years from the date of these presents, the exclusive right, privilege, and liberty of making, constructing, and using and vending to others to be used in the Dominion of Canada the said invention, subject, nevertheless, to adjudication before any court of competent jurisdiction:

Provided, that the grant hereby made is subject to the conditions contained in the 28th and other sections of the act aforesaid.

The partial fee required for the term of five years having been paid to the commissioner of patents, this patent shall cease at the end of five years from date unless at or before the expiration of the said term the holder thereof pays the fee required for the further term or terms, as provided by section 17 of the act aforesaid.

534 In testimony whereof I have hereunto set my hand and caused the seal of the patent office to be hereunto affixed, at the city of Ottawa, in the Dominion of Canada, this thirteenth day of July, in the year of our Lord one thousand eight hundred and eighty-three.

[SEAL.]

G. H. POPE,
Commissioner of Patents.

Countersigned:
A. J. CAMLINE,
Act'g Deputy Commissioner.

535 *Specification.*

{Patent Office. Jun- 20, 1883. Canada.}

To all *to* whom it may concern:

Be it known that I, Edward L. McClain, of the town of Greenfield, in the county of Highland, in the State of Ohio, gentleman, have invented certain new and useful improvements in pads for horse collars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to methods of attaching pads to horse collars and to other parts of harness where adjustable temporary pads are used. My improvement consists in attaching to a pad spring clasps which are intended to embrace the rolls of the collar and thereby secure the pad to the latter.

The object of my invention is to furnish more perfect methods of adjustably attaching pads to horse collars than those yet devised, and the methods now to be described are essentially the same as those set forth in patents granted to me in the United States; but this application is more complete as regards the scope of the invention and the best modes of its application and use.

The first United States patent was dated June 20, 1882, No. 259,700, and described a two-roll spring such as shown in Fig. 4. The second patent, dated Nov. 7th, 1882, No. 276,011, described a modification of the spring of the former patent—that is, a single-roll spring, as shown in Figs. 1, 2, and 3.

Fig. 1 of the accompanying drawing shows a horse-collar pad or a sweat collar with single-roll springs attached.

Fig. 2 shows a section of the sweat collar adjacent the spring and the method of attaching the spring to the pad.

536 Fig. 3 shows a perspective view of such a spring attached to a pad, and also a stiffening piece, S, sewed to the surface material of the pad.

Fig. 4 shows the two-roll spring, and Fig 5 shows a spring for such a pad made of elastic wire.

While my improvements are intended to be applicable to various kinds of pads for horse collars and other parts of harness, they are especially intended to apply to sweat or cushion pads which are placed beneath or under the collar and isolate the collar from the horse's shoulders and neck.

Referring to Figs. 1, 2, and 3, it will be seen that the elastic spring S, there shown, is so curved as to partially encircle and hug the fore roll of the horse collar, and so to hold the portion of the pad to which the spring is attached securely to the collar, and yet not interfere with the hame. It is well known that the fore roll of a horse collar is of nearly uniform size from end to end; this being the case, the spring first mentioned will clasp the fore roll equally well at any desired place, and hence will enable such a pad as shown in Fig. 1 to be used under collars of different lengths, the pad in any case being held snugly against the inside and the top of the collar. Further, since the springs S are elastic, such a pad may be used on collars having rolls of different sizes. But the use of curved elastic springs as a means of adjustably attaching a pad to a horse collar is not so much because it is desired to use such pads on different-sized collars as that such a spring enables a pad to be attached to or disengaged from a collar with ease and in the quickest manner possible.

537 To attach the pad shown in Fig. 1 to a horse collar, the body of the pad is placed within the collar from the rear and the part adjacent the spring S is pulled sufficiently through the collar to enable the free end of the spring to be placed against the outside of the fore roll of the collar adjacent the roll seam, and then by holding the end of the spring against the roll and pushing the pad back into place within the collar the spring is made to clasp the fore roll. When the springs are clasped to both rolls of the collar they can then be adjusted along the rolls to enable the pad to be fitted to the collar. The pad is disengaged from the collar by reversing the above operation.

Such a pad can readily be attached to a collar when it is in place on the neck.

It is also well known that the back roll or body side of the collar varies considerably in the sizes of its cross-sections at different positions along the roll, being small at the top, large adjacent the tug or trace, and small at the gullet.

The two-roll spring shown in Fig. 4 is best suited to pads of the kind shown in Fig. 1, but which are open at the top instead of at the bottom. However, while the curve for the fore roll will fit that roll at any position along the side of the collar, the curve for the back roll will fit that roll properly only when used in approximately the same position, at about the same cross-section of the roll.

In placing a pad provided with two-roll springs into a collar the spring curve for the fore roll could be clasped to that roll in the same manner as just described for the single-roll spring; but the
538 curve for the back roll would then have to be bent somewhat to enable it to encircle and clasp that roll.

The two-roll spring is more cumbersome to attach to the collar than the single-roll spring; and, as it must be attached to about the same-sized cross-section of collar, it is limited in use to collars of approximately the same size.

By referring to the figures it will be seen that the free ends of the springs are turned slightly outwards, forming curved tips. Experience has proven that the roll curves should have such tips in order that the ends of the springs may not abrade the collar rolls when the pads are attached to and disengaged from the collar.

Fig. 5 shows a mechanical equivalent for the single-roll spring illustrated in Figs. 1, 2, and 3.

The spring in this case is shown isolated from a pad and in an inverted position as compared with the other figures and as if its base were resting upon a table.

It is made of wire and is tempered, the wire being bent upon itself so as to form a curved clasp for the fore roll, and the form of the clasp is such that the wire has about the same position as the edges of the curve of the single-roll spring; and provision is made for riveting the spring to the pad by bending each end of the wire into a loop through which to pass a rivet. The wire may extend back from the rivet loop an inch or more upon the surface of the pad and may be bent at the end, all this being intended to give a base to the spring, which will be pressed upon the surface of the pad and that of the collar when the spring is clasped around the collar roll.

539 Wire may be bent into various-shaped spring clasps, which may be provided with one or more loops for rivets. In fact, the ends of the spring might be so bent as to be capable themselves of being clinched or riveted through or to the pad, and thereby the use of rivets could be dispensed with.

But all such modifications of spring clasps are, of course, like the one shown in Fig. 5, mechanical equivalents of the spring shown in Figs. 1, 2, and 3.

Were it desirable, two-roll springs could be made in a similar manner. Such springs can be riveted directly to the pad or they may be riveted to a stiffening piece, which may be sewed or riveted to the pad as follows:

Figs. 1 and 2 show an elastic metallic single-roll spring attached directly to the pad, and leather washers S, beneath the rivet heads which come on the under side of the pad. These washers S may be considered as small detached stiffening pieces, since, were a single piece of leather used here on the under side, as shown in Fig. 3 on the outside, said piece would have the function of giving a stiffer material for the rivet heads to hold against than the woven fabric forming the surface material of the pad, and these washers have the same functions.

The pad shown in the figures is one of various forms of pads, which are generally made with a woven surface material and are stuffed with goat hair and are quilted.

Fig. 3 shows a stiffening piece, S, sewed to the surface material of the pad. The spring may be riveted to the stiffening piece only or the rivets may pass through the outer surface material of the pad or they may pass entirely through the pad and be riveted on the
540 under side, as shown in Fig. 2. Such stiffening pieces as shown and mentioned may be placed between the spring and the pad, as shown in Fig. 3, or on the under side of the pad or in both places, as may be found desirable. I am at present fastening the springs on as shown in Fig. 2, using a riveting machine.

The above methods of riveting apply to all varieties of springs. The stiffening pieces mentioned are not considered as forming parts of my invention.

These springs are applicable to any sweat or cushion pad which separates the collar from all portions of a horse's neck and shoulders and which is open at the withers, at the gullet, or at both top and bottom, or which is closed at top and bottom, and any such pads or portions of pads may have fore rolls, back rolls, or both, or no rolls at all.

These springs can also be used on pads which are placed beneath the collar at the withers or wherever a collar pad is used for isolating a portion only of a collar from the horses shoulders or neck. They can also be used for attaching pads to other portions of harness, as to breast collars, &c.

A pad provided with single-roll springs cannot only be speedily attached to or removed from a collar, but, since the pad will remain attached to a collar by means of the springs when the collar is slipped over the horse's head, whether the collar be open at the top or at the bottom or not at all, such a pad has the advantage of being more convenient for use and of more general use than any other known pad. However, pads may be made open at the top for use with collars open at the top, or open at the bottom for collars open at the bottom. They may also be made open at
541 top and bottom—that is, in halves—in which case the springs would be placed at both top and bottom.

As an article of manufacture, the single-roll spring can be made and attached to a pad at much less expense than the two roll spring.

It does not require so much material and is more convenient to attach by riveting by hand or by machinery. All such springs require tempering in order that they may have the desired amount of elasticity.

It is to be understood that my springs are to be metallic, or of any suitable elastic substance, and that the pads to which they are to be attached are to be of any kind, material, or construction whatever to which it would be suitable and desirable to attach such springs, and that I am to use such arrangements as may be most suitable, and further that the wire spring shown and described or any modification of such wire spring is covered by my claims as

being a mechanical equivalent for the spring shown in Figs. 1, 2, and 3 or for that shown in Fig. 4.

Claims.

1. As an attachment to a horse-collar pad or other harness pad and as a means of adjustably attaching a pad to a horse collar or other part of harness, the elastic single-roll or single-curve spring S, constructed, arranged, attached, and operating substantially in the manner shown or described.

2. The combination with a horse-collar pad of elastic single-roll springs S, substantially in the manner shown or described and for the purposes set forth.

3. As an attachment to a horse-collar pad and as a means
542 of adjustably attaching a pad to a horse collar or other part of harness, the elastic two-roll spring S, constructed, arranged, attached, and operating substantially in the manner shown or described.

4. The combination with a horse-collar pad of elastic two-roll spring S, substantially in the manner shown or described, and for the purposes set forth.

Greenfield, O., 31st of May, 1883.

[SEAL.] E. L. McCLAIN.

Signed in the presence of—
A. M. MACKERLEY.
FRANK A. BUSH.

This is the specification referred to in the affidavit of Edward L. McClain hereto annexed.

Sworn before me this 31st day of May, A. D. 1883.

A. M. MACKERLEY,
Notary Public, H. Co., O.

543 *Sections 17 and 28 of the "Patent Act of 1872" and Acts Amending the Same.*

17. The term limited for the duration of every patent of invention issued by the Patent Office shall be fifteen years; but at the time of the application therefor it shall be at the option of the applicant to pay the full fee required for the term of fifteen years or the partial fee required for the term of five years or the partial fee required for the term of ten years. In case a partial fee only is paid the proportion of the fee paid shall be stated in the patent and the patent shall, notwithstanding anything therein or in this act contained, cease at the end of the term for which the partial fee has been paid, unless at or before the expiration of the said term the holder of the patent pays the fee required for the further term of five or ten years and takes out from the Patent Office a certificate of such payment (in the form which may be from time to time adopted), to be attached to and to refer to the patent and under the signature of the Com-

missioner, or, in case of his absence, another member of the privy council; and in case such second payment, together with the first payment, makes up only the fee required for ten years, then the patent shall, notwithstanding anything therein or in this act contained, cease at the end of the term of ten years, unless at or before the expiration of such term the holder thereof pays the further fee required for the remaining five years, making up the full term of fifteen years, and takes out a like certificate in respect thereof. Every patent heretofore issued by the Patent Office in respect of which the fee required for the whole or for any unexpired portion of the
544 term of fifteen years has been duly paid according to the provisions of the now existing law in that behalf has been and shall be deemed to have been issued for the term of fifteen years, subject, in case a partial fee only has been paid, to cease on the same conditions on which patents hereafter issued are to cease under the operation of this section.

28. Every patent granted under this act shall be subject and expressed to be subject to the condition that such patent and all the rights and privileges thereby granted shall cease and determine and the patent shall be null and void at the end of two years from the date thereof, unless the patentee or his assignee or assignees shall within that period have commenced and shall after such commencement continuously carry on in Canada the construction or manufacture of the invention or discovery patented, in such manner that any person desiring to use it may obtain it or cause it to be made for him at a reasonable price at some manufactory or establishment for making or constructing it in Canada, and that such patent shall be void if, after the expiration of twelve months from the granting thereof, the patentee or his assignee or assignees, for the whole or a part of his interest in the patent, imports or causes to be imported into Canada the invention for which the patent is granted; and provided always that in case dispute should arise as to whether a patent has or has not become null and void under the provisions of this section, such disputes shall be settled by the minister of agriculture or his deputy, whose decision shall be final.

2. Whenever a patentee has been unable to carry on the construction or manufacture of his invention within the two years
545 hereinbefore mentioned the Commissioner may, at any time, not more than three months before the expiration of that period, grant to the patentee a further delay on his adducing proof to the satisfaction of the Commissioner that he was for reasons beyond his control prevented from complying with the above-mentioned condition.

3. The Commissioner may grant to the patentee or his assignee or assignees, for the whole or any part of the patent, an extension for a further period of time, not exceeding one year beyond the twelve months limited by the first paragraph of this section, during which he may import or cause to be imported into Canada the invention for which the patent is granted: Provided, that the patentee or his assignee or assignees, for the whole or any part of the patent, shall show cause satisfactory to the Commissioner to warrant the granting

of such extension; but no extension shall be granted unless application be made to the Commissioner at some time within three months before the expiry of the twelve months aforesaid, or any extension thereof.

(Here follows diagram marked p. 546.)

547 (2–175.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the bound volumes of the library of this office of the specification (no drawing in this case) in the matter of the English letters patent granted Martin Vanbutchell, A. D. 1783, number 1404, for improvement in spring bands for fastenings for various purposes.

In testimony whereof I, R. B. Vance, acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed [SEAL.] this 17th day of September, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

R. B. VANCE,
Acting Commissioner.

548 A. D. 1783. No. 1404.

Spring bands or fastenings for various purposes.

Vanbutchell's Specification.

To all to whom these presents shall come I, Martin Vanbutchell, of the Liberty of Westminster, surgeon dentist, send greeting:

Whereas I, the said Martin Vanbutchell, did, by my petition, humbly represent unto his present most excellent majesty King George the Third that I had, after much application, invented "new spring bands — fastenings for the apparel or furniture of man or beast, which bands or fastenings by their certain reaction or small friction were more easy, safe, or lasting than other bands or fastenings, and of public good," wherefore I therefore humbly begged his said majesty to grant unto me, the said Martin Vanbutchell, my ex'ors, adm'rs, and assigns, his royal letters patent under the great seal of England for the term of fourteen years for the sole making and vending the same within this realm, the Dominion of Wales, and town of Berwick-upon-Tweed; and his said majesty, being willing to give encouragement to all arts and inventions which might be for the public good, was graciously pleased to condescend to — my request, and therefore, by his royal letters patent, under the great seal of Great Britain, bearing date at Westminster, the first day of December, in the twenty-fourth year of his reign, of his especial grace, certain knowledge, and mere motion, for himself, his heirs and successors, did give and grant unto me, the said

Pads for Horse Collars.

no. 348.
McClain
v.
Ortmayer
et al.
} p. 546

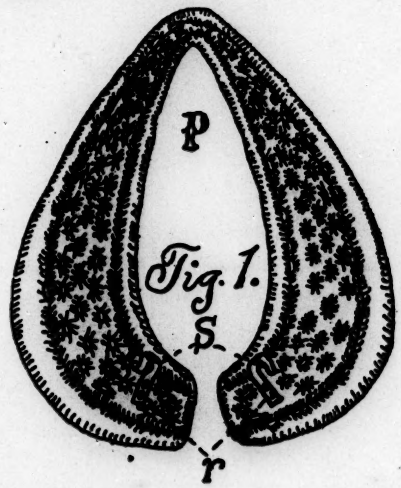

Fig. 1.

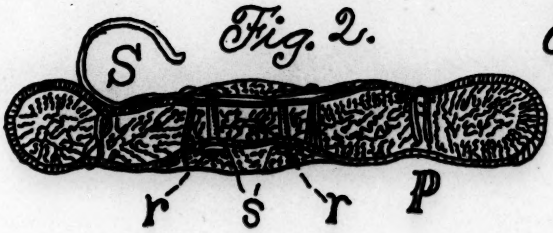

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Reference.

P - Pad.	r - Rivet.
S - Spring.	s - Stiffening piece.

Certified to be the Drawings referred to in the Specification hereunto annexed.
A. M. Mackerley Notary Public Ke Co.

Greenfield, Ohio, U.S.A., May 31st 1883.

E. L. McClain - Inventor

Witnesses.
A. M. Mackerley
Frank A. Bush.

E. P. Robbins, att.

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Martin Vanbutchell, my ex'ors, adm'ors, and assigns, his especial license, full power, sole privilege, and authority that I, the said Martin Vanbutchell, my ex'ors, adm'ors, and assigns and every of them, by myself and themselves or by mine or their deputy or deputies, servants, or agents, or such others as I, the said Martin Vanbutchell, my ex'ors, adm'ors, or assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term of years therein expressed, should and lawfully might make, use, exercise, and vend my said invention within that part of his said majesty's Kingdom of Great Britain called England, his Dominion of Wales, and town of Berwick-upon-Tweed in such manner as to me, the said Martin Vanbutchell, my ex'ors, adm'ors, or assigns, or any of us, should in our discretions seem meet, and that I, the said Martin Vanbutchel, my ex'ors, adm'crs, and assigns, should and lawfully might have and enjoy the whole profit, benefit, commodity, and advantage from time to time coming, growing, accruing, and arising, by reason of the said invention for and during the term of years therein mentioned; to have, hold, exercise, and enjoy the said license, powers, privileges, and advantages thereinbefore granted or mentioned to be granted unto by me, the said Martin Vanbutchell, my ex'ors, adm'ors, and assigns, for and during and unto the full end and term of fourteen years from the date of the said letters patent next and immediately ensuing and fully to be complete and ended according to the statute in such case made and provided, in which said letters patent is contained a proviso that if I, the said Martin Vanbutchell, should not particularly describe and ascertain the nature of my said invention and in what manner the same is to be performed by an instrument in writing, under my hand and seal, and cause the same to be enrolled in his said majesty's high court of chancery within four calendar months next and immediately after the date of the said letters patent, that then the said letters patent and all liberties and advantages whatsoever thereby granted should utterly cease, determine, and become void, anything thereinbefore contained to the contrary thereof in anywise notwithstanding:

Now, know ye that I, the said Martin Vanbutchell, in compliance with the said proviso, do hereby declare that my said invention is of a curious, useful, public, easy, safe, lasting, mechanical, important, extensive, and comprehensive nature, taking in each size and sort and all sorts and sizes of my new spring band or fastenings or my new spring bands and fastenings for all parts and every part of the common chirurgical, military, naval, travelling, and all other apparel or furniture or apparel and furniture of man or beast or of human beings and brute creatures, which said new spring bands or fastenings or new spring bands and fastenings are made of animal, vegetable, and metallic materials and performed in manner following—that is to say:

One spring, two springs, and any number of springs made of silk, catgut, cotton, hair, worsted, thread, and such materials twirled, twisted, or curled so tight as the materials will bear, which said springs are put in straight, cross, diagonal, and all other lines as may

best suit the design; one spiral spring, two spiral springs, and every greater number of spiral springs made of gold, silver, copper, brass, steel, iron, tin, pewter, lead, or other metal or mixture of metals, with or without semi-metals, forged, rolled, or drawn into wire of any form and twirled, pulled, twisted, spun, or wound on moulds, which are proportioned to the strength and extension wanted. For instance, the brass wire to make spiral springs for my new spring bands or fastenings, which are called horse blinds and fixed to the front of the bridle to be occasionally drawn over or before the eyes of a brute creature by means of a rein, two pieces of lacing, and four bits of string from the bottoms of said horse blinds, the said rein being pulled by an human being while on the back of said brute creature. I say the brass wire to make said spiral springs, if put in a watch-maker's sector at figure five, the mould to wind said wire on or upon, if put in said sector at the same time, fits at
551 or about figures seventy; the brass wire to make spiral springs for my new spring bands or fastenings in the seat of saddles, if put in said sector at figure six, the mould fits at or about figures ten; the brass wire to make spiral springs for my new spring bands or fastenings for hats, if put in said sector at figure eight, the mould fits at or about figures forty, which last proportion is nearest to the spiral springs used for most of my other new spring bands or fastenings.

The bredoon or snaffle new spring band or fastening is a strong chain made of wire rings to go through or across the mouth of the beast. The wire to make them and all other rings used in my new spring bands or fastenings, if put in sector aforesaid at figures twenty-one, the mould fits at or about figures fifty-nine.

That the joints of said rings may be very close they are cut through with a very thin saw, which has very fine teeth. The aforesaid spiral springs have their lines close together as for glove bands or far apart as for perch-bolt fastenings. Each row of spring is in one length as for knee bands or two lengths as for hat bands or three lengths or more as for boot fastenings. The wire to make said spiral springs for neck bands is about the size of an horse-tail hair; the lines for perch-bolt fastenings are about the size of a man's small finger. Some of said spiral springs have an eye at the end about the size of said spring, made with a pair of round-nose plyers, which eye is so true and neat and the end of the wire is laid so much in the middle of the tube that if you put on an hook in the eye and extend the spring it forms a straight line. Thus are spiral springs to make spring waistbands. Some of said spiral springs have the end of the wire cut close or bent in an angle and made round and smooth. Thus are springs for an entire set
552 of artificial teeth. Some of said spiral springs have the end of the wire made very smooth and turned within the line to be out of the way, as in flexible tubes for the œsophagus and urethra. The wire to make said spiral springs is sometimes twisted or twirled two or more together or flatted or covered with gold, silver, tin, silk, twist, mohair, cotton, worsted, thread, or such materials before it is twirled or wound. Sometimes said spiral springs are made or

bruised flat or japanned after they are wound where partial outside pressure is wanted. As to hats, that is performed by straight springs made of metal or metals, whalebone, tortoise shell, ivory, bone, paper, composition, pasteboard, horn, cane, leather, wood, or such material, which said straight springs either act alone or with said spiral springs by being put without, within, upon, or between them.

When the ends of the said spiral springs are joined together or to any other thing, hooks, eyes, rings, or esses made true and shut close, or wire, catgut, silk, lacing, trolling, line twist, mohair, cotton, worsted, thread, or such materials are used. When said spiral springs are covered to make my new spring bands or fastenings gold or silver lace, frame-work, or other knitting, netting, knotting, chain-work, or other looping, lacing, ribband, tape, girth webb, gartering, girdling, silk, nankeen, calico, cotton, linen, woolen, leather, or such materials are used. Where — is wanted to put on or take off my new spring band or fastening in a clean way as to the clog and eye, a ring, an esse, a string, a button, or some such thing made very fast at or near the middle of said spring band or fastening will do. To fix my said new spring bands or fastenings to the different parts buckles, buttons, studs, lockets, clasps, hooks, eyes, esses, rings, strings, and other such materials are used.

553 My new invented hooks are made thus: Hold a blanket pin in a pair of round-nose plyers about one-quarter of an inch from the head end; then turn it round said plyers, so as to make an eye about one-tenth part of an inch width inside; then hold said pin in a pair of larger round-nose plyers about half an inch from the point end and turn it half round said plyers, so as to make a hook about one-fifth of an inch width inside. If you mean to have a blunt-pointed hook, cut off the sharp point in length about the thickness of a new sixpence; then file it square, and round off the edge as a watch-finisher who is a good workman rounds the top of a cock-pin.

My new spring bands or fastenings for bridle, harness, and other leather: That for a bridle is a long rim like a buckle rim, with a bar across the middle. In or near the midst and on the top of said bar is a round-pointed pin, nearly upright, about one-twelfth part of an inch diameter and about one-fourth part of an inch long in or about the middle, and at the under part of each end of said rim is a round-jointed pin, nearly downright, about one-twelfth part of an inch diameter and about one-tenth of an inch long, which pins serve for tongues, and closes by going into holes made in the leathers to receive them.

The said rims and pins are made in due proportion for harness and other leathers.

My new spring bands or fastenings for the feet of brute creatures are shoes made of one or more of the aforesaid metals, with grooves or furrows all round them to keep the beasts from slipping. Each of said grooves or furrows are so deep as those well made in a horse-shoe for the nail heads, and are nearly so broad at bottom as at top.

Each fore shoe has four grooves or furrows, more or less.

554 Each hind shoe has three grooves or furrows, more or less.

My new spring band or fastening for a watch, to keep it safe in the job: Sew a large button firmly on the waistband about midway between the top button on the waistband and the button at the cod-piece place, the side of the job, about an inch from the end of the waistband; put a strong loop of plaited lacing, or some such material, at the side of the job and edge of the waistband, which said loop may over the watch-chain or string be safely put, or upon, and easily taken off from the said large button firmly sewed to receive the said strong loop.

My new spring band or fastening for the stirrup leather, called a stirrup bar, is made of some of the aforesaid metals. The round part of said bar, for stirrup leather to lay on, is about five-twelfths of an inch diameter, and so round and smooth as well-drawn wire.

The turning of said bar to make an angle has not a sharp corner, as usual, but is round as a crown piece. Each flattest part of said bar is so broad as a new six pence, and about an eighth part of an inch thick.

My new spring band or fastening for the foot of a rider, called a stirrup, is made of some of the aforesaid metals, and has the top and sides as another stirrup, but at bottom has an outside circular rim, or an oval so short as to be near a circle, about five inches width outside, and an inside circular rim, or an oval so short as to be near a circle, about an inch and half width inside.

From the inner part of the outer rim to the outer part of the inner rim are six bars, or more or less, nearly at equal distances. Each of said rims and bars are about one-fifth part of an inch broad.

My new spring bands or fastenings for saddle-trees are made of steel well tempered, and put, instead of iron plates, at the head or cantle, or head and cantle.

555 My new spring band or fastening for the perch bolt of a carriage is a very strong open spiral or flat spring or more springs than one put under the head or over the point or under the head and over the point of said perch bolt, which said spiral or flat spring or springs will save the perch bolt from breaking and the perch from being strained. My new spring bands or fastenings or bands and fastenings are applied to the parts following—that is to say, hat, bonnet, kerchief, hood, cap, wig, curls, head, spectacles, œsaphagus, stock, cravat, neck, shoulder, arm, glove, wrist, hand, finger, back, breast, belly, loins, navel, side, waist, womb, pessary, urethra, penis, thigh, knee, patella, leg, tendo achilles, ankle, heel, foot, toe, necklace, gallows, shoulder-straps, stays, jumps, waistcoat, belt, girdle, truss, petticoat, pockets, breeches, stocking, garter, boot, spatterdash, gaiter, half-boot, slipper, shoe, calash, clog, patten, artificial teeth, artificial arm, artificial hand, artificial thigh, artificial leg, artificial foot, bedstead, sofa, settee, couch, chair, stool, bell, clock, time-piece, watch, perch bolt, horse-blind, bridle, harness, bredoon, snaffle, bearing, rein, meadows, rein, martingale, breast-plate, saddle-tree, saddle-civet, saddle-seat, saddle-girth, surcingle, stirrup, stirrup leather, crupper, roller, and every other part and all other parts of the common chirurgical, military, naval, travelling, and all other apparel or furniture or apparel and furniture of man or beast or of human

beings and brute creatures where my new spring bands or fastenings can well be used.

Each new spring band or fastening for the hat or cap has a joint before and a joint behind, but no joint on either side, and is divided in or near two equal parts, with one strait spring or more than one on each side to take off pressure from the forehead and hind-head.

Each new spring band or fastening for the wig, neck, arm,
556 glove, wrist, gallows, shoulder-strap, stays, jumps, waistcoat, belt, girdle, truss, petticoat, pockets, back, breast, belly, navel, side, waist, thigh, knee, leg, breeches, stocking, garter, boot, spatterdash, gaiter, half-boot, clog, or patten is flat or has two or more choice springs put side by side.

Each new spring band or fastening for the waistband of breeches has six choice springs or more or less put in the back part of said waistband. Each new spring band or fastening called saddle-girth or surcingle has eleven choice springs or more or less put in the belly part of said saddle-girth or surcingle. Each new spring band or fastening for a fractured patella or ruptured tendo achilles has two very strong spiral springs which are joined together with two strong eyes, from which go bandages to fix the said new spring band or fastening.

My rich, elegant, and expensive new spring band or fastening is made of silver wire covered with fine gold, and is performed in manner following—that is to say, have the wire drawn very hard and spun or wound close on the mould; then pull the lines far apart and afterwards push them close on said mould; then make a small eye at each end of spiral spring and join them together with a silver gilt ring; so doing you will have a true, neat, open, valuable, new spring band or fastening.

That on my hat weighs about twenty-eight pennyweights and is in one length. The said wire when put in aforesaid sector figure six, the mould fitted at or about figures thirty-seven.

To clean said new spring band or fastening I wash it in hot water with my shaving brush.

In witness whereof I, the said Martin Vanbutchell, have hereunto set my hand and seal the twenty-ninth day of March, in the twenty-fourth year of the reign of our sovereign Lord George the Third, by the grace of God of Great Britain, France, and Ireland king,
557 defender of the faith and so forth, and in the year of our Lord one thousand seven hundred and eighty-four.

MARTIN VANBUTCHELL.

Sealed and delivered, being first duly stamped, in the presence of—

T. PATRICK,
WM. RHODES.

And be it remembered that on the thirty-first day of March, in the year of our Lord 1784, the aforesaid Martin Van Butchell came before our said lord the King, in his chancery, and acknowledged the specification aforesaid and all and everything therein contained and specified in form above written.

Thomson.

And also the specification aforesaid was stampt according to the tenor of the statutes made for that purpose.

Inrolled the thirty-first day of March, in the year of our Lord one thousand seven hundred and eighty-four.

E. C. C.; M. L. M.

558 (2–175.)

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the bound volumes of the library of this office of the specification and drawing in the matter of the English letters patent granted William Erskine Cochrane and William Marshall Cochrane March 10th, 1853, No. 612, for improvement in girths or pads for saddles.

In testimony whereof I, R. B. Vance, acting Commissioner of Patents, have caused the seal of the Patent Office to be [SEAL.] affixed this 17th day of September, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

R. B. VANCE,
Acting Commissioner.

559 A. D. 1853. No. 612.

Girths or Pads for Saddles.

Letters patent to the Honorable William Erskine Cochrane, of Albany street, Regent's Park, in the county of Middlesex, and William Marshall Cochrane, of Kingston, in the county of Surrey, Esquire, for the invention of improvements in girths or pads for retaining saddles in their places.

Sealed the 3rd June, 1853, and dated 10th March, 1853.

Specification in pursuance of the conditions of the letters patent filed by the said Honorable William Erskine Cochrane and William Marshall Cochrane in the Great Seal Patent Office on the 9th of September, 1853.

To all to whom these presents shall come we, William Erskine Cochran, of Albany street, Regent's Park, in the county of Middlesex, and William Marshall Cochrane, of Kingston-on-Thames, in the county of Surrey, send greeting:

Whereas her most excellent majesty Queen Victoria, by her letters patent bearing date the tenth day of March, in the year of our Lord one thousand eight hundred and fifty-three, in the seventeenth year of her reign, did, for herself, her heirs and successors, give and

grant unto us, the said William Erskine Cochrane and William Marshall Cochrane, her special license that we, the said William Erskine Cochrane and William Marshall Cochrane, our executors, administrators, and assigns, or such others as we, the said William Erskine Cochrane and William Marshall Cochrane, our executors, administrators, and assigns, should at any time agree
560 with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man an invention for "improvements in girths or pads for retaining saddles in their places," upon the conditions (amongst others) that we, the said William Erskine Cochrane and William Marshall Cochrane, by an instrument in writing under our hands and seals, should particularly describe and ascertain the nature of the said invention and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said letters patent:

Now, know ye that I, the said William Erskine Cochrane, for myself and on behalf of William Marshall Cochrane, do hereby declare the nature of the said invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement thereof (that is to say):

This invention has for its object the retaining of saddles in their proper places on the backs of horses and will be readily understood by reference to the annexed drawing. A A is a pad made of webbing or other fit material with a common girth attached to it. B is a piece of vulcanized India rubber, the ends of which are strongly stitched to the pad in the inside so as when in use to come first in contact with the horse's back and take the strain from the upper part of the pad. C is a piece of leather attaching a hook, D, to the pad, another similar hook being fixed in the same on the opposite side.

In applying the "girth or pad" the front part is to be placed where it is desired the fore part of the saddle should be fixed. The
561 middle of the India-rubber spring is to be placed exactly over the ridge of the horse's back and the girth is to be tightened till that part of the pad above the spring comes nearly in contact with it, but not so as to take any of the strain; then put on the saddle, placing the front of the panel in the hooks and girthing rather loosely so as not to slacken the "girth or pad."

16994, D., '86. Having thus described the nature of our said invention and the manner of performing the same, we would have it understood that we make no claim to the pad or girths as heretofore used; but what we claim is the combination of apparatus herein described for "retaining saddles in their places."

In witness whereof we, the said William Erskine Cochrane and William Marshall Cochrane have hereunto set our hands and seals

the ninth day of September, in the year of our Lord one thousand eight hundred and fifty-three.

WILLIAM ERSKINE COCHRANE.
—— ——. [L. S.]

Witness:
WILLIAM HARRISON, JR.,
116 *Chancery Lane.*
E. C. C.; M. L. M.

(Here follows diagram marked p. 562.)

563 (2–175.)

[In pencil:] Banning. 15365. $26.20, p'd.

DEPARTMENT OF THE INTERIOR.

[Vignette.]

UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file wrapper and contents in the matter of the letters patent granted Edward L. McClain June 20th, 1882, number 259,700, for improvement in pad for horse collars.

In testimony whereof I, M. V. Montgomery, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 28th day of July, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

Seal Patent Office, United States of America.

M. V. MONTGOMERY,
Commissioner.

564 $15.00. CINCINNATI, O.,
GREENFIELD, HIGHLAND CO., OHIO, *April 22d*, 1882.

To the Commissioner of Patents:

Enclosed please find postal money order for $15.00 for payment of first fee of my application for a patent for a "horse-collar sweat pad," of which the specification & drawing were expressed to you by the M. & C. Exp. Co. April 22d, 1882.

Please address receipts or other communications to E. P. Robbins, my attorney, to his above address.

EDWARD L. McCLAIN.

[Endorsed:] Patent Office U. S., Apr. 24, 1882.

565 *Petition, with Power of Attorney.*

To the Commissioner of Patents:

Your petitioner, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, prays that letters patent may be granted to him for the improvement in harness, horse-collar sweat pads, set forth in the annexed specification, and he hereby appoints Edward P. Robbins, M. E., of the city of Cincinnati, State of Ohio, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the office connected therewith.

EDWARD L. McCLAIN.

566 *Specification.*

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented a new and useful horse-collar sweat pad, of which the following is a specification:

My invention relates to that class of horse-collar pads which are placed between the collar and the horse's shoulders, and are adjustably attached to the collar and known as sweat pads.

The object of my invention is to produce a sweat pad for a horse collar which can be easily and readily attached to or taken from the collar and which can be fitted to collars varying in size.

Fig. 1. is a view of my sweat pad shown in connection with those portions of a horse collar which will best illustrate the use of my improvements.

567 Fig. 2 is a perspective view showing one of the steel springs as attached to the pad.

Fig. 3 is a view of the section of the pad coincident with the plane touching the side of the spring, and is intended to show how the springs are attached to the pad.

Fig. 4 shows the gullet of the pad with the billet loop *l* for the choke-strap billet attached thereto.

The pad proper is made so as to form an intermediate cushing between the collar and the horse's shoulders, and of a size such as to entirely isolate the collar from all portions of the horse's shoulders. The surface material is mad- of suitable coarsely woven material, such as bag cloth, which, besides absorbing moisture, will be permeable to air. The pad is plain, with the exception of a fore wale or small roll, *w*, and is stuffed with hair, and is stitched in the usual manner.

568 The sweat pad as just described is not claimed as a new invention. My improvements consist in the addition of springs *s s* and choke-strap billet loop *b*. The top ends of the pad sides or bodies are adjacent the withers of the neck, and are pro-

vided with elastic springs—steel—which are so made as to be capable of being opened and then clasped around the body of the sides of the collar. Thus one end of a spring is so curved as to partly encircle the fore wale or small roll of the collar, and to hug it so closely as to keep out of the way of the hame, and the other end is so curved as to similarly partly encircle and hug the after wale or body side of the collar, and yet not interfere with the hame.

Such construction will enable the pad to be easily and readily attached at its top ends to the top ends of the collar, and also will permit of attachment at variable positions along the sides of the collar, so that it can be easily fitted to collars of different sizes.

569 The choke-strap billet loop *l* is intended to serve to attach the gullet of the pad to the gullet of the collar while permitting the billet of the choke-strap to encircle the gullet of the collar and not that of the pad, and hence be isolated by the pad as a cushion from coming in contact with the horse's neck.

Where no choke-strap is used a billet can be used to keep the pad in position at the gullet or the loop need not be employed, as the springs will keep the pad fast to the collar.

In the figures P indicates the pad; C, the collar; *w*, the fore wale of the pad; *s s*, the elastic springs; *l*, the choke-strap billet loop; *b*, the choke-strap, and *r r* the rivets used to attach the springs or the loop to the pad.

In Fig. 3 the method of attaching the springs to the pad is shown, and also the shapes of the curved elastic clasps or springs.

As may be seen, the rivets *r r* pass entirely through the pad and springs *s s* in such a manner as while securing the springs
570 to the body of the pad at the same time serve to bind the two sides of the body of the pad firmly together, and hence make that part of the pad to which the springs are attached extra strong and firm. But it would not deviate from my invention to pass the rivets through the surface material in contact with the springs alone or to use a stif-ning piece on the inside or outside of said surface piece or between the two surface pieces or both between and without said surface pieces.

In Fig. 4 the method of attaching the choke-strap billet loop to the gullet of the pad by means of rivets is illustrated, and what is asserted in the preceeding paragraph as to the attachment of the springs by means of rivets is true in reference to the attachment of said loop by means of rivets; but at the same time other methods of attaching the loop, as by stitching, may, if desirable, be employed.

I think leather the best material for said loop.

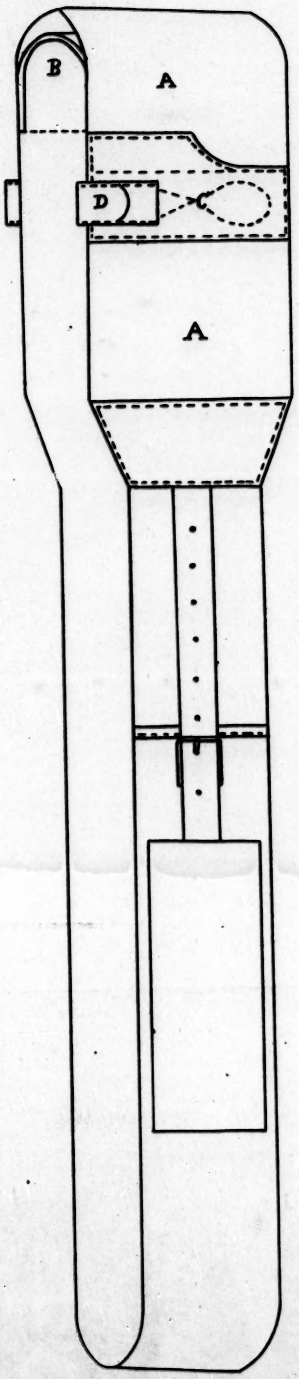
571 *Claims.*

What I claim as new, and desire to secure by letters patent, is—

(1.) As attachments to a sweat or other horse-collar pad, the elastic springs *s s*, substantially as described, and for the purposes set forth.

A.D. 1853, MARCH 10. N° 612.

COCHRANE & COCHRANE'S SPECIFICATION



No 348
McClain
v
Ortmayer
et al.
} p. 562

Erase, May 16, '62.	(2.) As an attachment to a sweat or other horse-collar pad, the choke-strap billet-loop *l*, substantially as described, and for the purpose set forth.

2. [*(3.)] The combination, in a sweat or other horse-collar pad, of the springs *s s* and of the choke-strap billet loop *l* with the collar pad, substantially as described, and for the purposes set forth.

Inventor, EDWARD L. McCLAIN.

Witnesses:
FRANK BLAZOR.
A. M. MacKERLEY.

572 *Oath.*

STATE OF OHIO, *Highland County,* } ss:

Edward L. McClain, the above-named petitioner, a citizen of the United States and resident of Greenfield, in the county of Highland and State of Ohio, being duly sworn, deposes and says that he verily believes himself to be the original, first, and sole inventor of the improvements in harness described and claimed in the foregoing specification; that the same has not been patented in any country to himself or to others with his knowledge or consent, and I do not know and do not believe that the same was ever known or used prior to my invention thereof.

EDWARD L. McCLAIN.

Sworn to and subscribed before me this 22d day of April, A. D. 1882.

[L. S.] A. M. MacKERLEY,
Notary Public, Highland County, Ohio.

[Endorsed:] Patent Office U. S., Apr. 24, 1882.

573 To the Commissioner of Patents:

I, Edward P. Robbins, M. E., patent expert and attorney for Edward L. McClain in the prosecution of the application for a patent for harness, to which this certificate is attached, desire to advise the Commissioner of Patents that before preparing the specification and drawings of said application I made a thorough search through the public records of the U. S. Patent Office under the following heads and from 1790 down to and including the 11th of April issue for 1882 of the Official Gazette, and the following are the patents examined, none of which, however, embody any of the elements essential to and claimed as the invention in said application:

Words and sentences enclosed between rules erased in copy.
* Figure enclosed in brackets erased in copy.

(1.) "Collar pad," 1790 to May 31st, 1871:

1869. – 3 (month) 9th (day).....No. 87619.

No drawings.

1870. – 3 – 29 – .....No. 101,252.
" – 4 – 26 – ..... " 102,403.
" – 11 – 8 – ..... " 108,995.
" – 12 – 27 – ..... " 110,518.

1871. – 3 – 14 – .....No. 112,713.
" – 3 – 21 – ..... " 112,797.

574 ("Collar pad"—contin.)

From May 31st, 1871:

1871. – 7 – 18 – .....No. 117,151.
1872. – 11 – 5 – .....(Monthly vols.)
1873. – 3 – 25 – ..... "
" – 5 – 20 – ..... "
1874. – (None.)
1875. – 12 – 14 ..... "
1876. – 4 – 11 – ..... "
1877. – 5 – 8 – ..... "
" – 6 – 26 – ..... "
– 12 – 11 – ..... "
1878. – (None.)
1879. – 8 – 5 – ..... "
" – 8 – 26 – ..... "
1880. – 4 – 27 – ..... "
" – 8 – 10 – ..... "
" – 8 – 17 – ..... "
" – 9 – 14 – ..... "
1881. – 1 – 18 – ..... "
" – 1 – 18 – ..... "
" – 2 – 1 – ..... "
" – 2 – 8 – ..... "
1881. – 4 – 12 .....(Official Gazette.)
– 12 – 27 ..... "
1882. – 3 – 7 – ..... "
" – 1 – 10 – ..... "

"Collar, combined shoulder and neck pad for horses."

575 (2.) "Collar, horse, sweat shield for":

1869. – 2 – 23 – .....No. 87257.

(3.) "Collar protector":

1879. – 1 – 7

(4.) "Collar support and friction pad":

1879. – 10 – 28

(5.) "Harness pad," 1790 to May 31st, 1871:

1858. – 6 – 15 – ------No. 20588.
1860. – 4 – 24 – ------ " 27984.
1867. – 4 – 30 – ------ " 64215.
" – 6 – 25 – ------ " 66086.
" – 12 – 24 – ------ " 72514.
1868. – 1 – 14 – ------ " 73389.
" – 2 – 18 – ------ " 74691.
1869. – 2 – 2 – ------ " 86376.
" – 2 – 16 – ------ " 87078.
" – 6 – 22 – ------ " 91747.
" – 11 – 9 – ------ " 96563.
1870. – 9 – 3 – ------ " 107,361.
1871. – 2 – 21 – ------ " 112,073.
1871. – 12 – 12 ------(From May 31st.)
1872. – 2 – 27 – ------(In monthly vols.)
" – 3 – 26 ------ "
" – 10 – 22 ------ "
" – 11 – 26 ------ "
" – 12 – 10 ------ "
1873. – 2 – 25 ------ "
" – 7 – 1 ------ "
" – 7 – 1 ------ "
" – 9 – 30 ------ "
" – 11 – 25 ------ "

576 "Harness pad"—(continued):

1874. – 1 – 20 ------(Monthly vols.)
" – 2 – 3 ------ "
" – 4 – 7 ------ "
" – 8 – 18 ------ "
1875. – 12 – 21 ------ "
1876. – 3 – 28 ------ "
" – 4 – 4 ------ "
" – 7 – 18 ------ "
" – 7 – 18 ------ "
" – 8 – 15 ------ "
" – 9 – 12 ------ "
1877. – 3 – 13 ------ "
" – 4 – 10 ------ "
" – 4 – 17 ------ "

1878. – 1 – 15 ------(Monthly vols.)
" – 4 – 16 ------ "
" – 4 – 23 ------ "
" – 10 – 29 ------ "
1879. – 1 – 21 ------ "
" – 2 – 11 ------ "
" – 9 – 9 ------ "
" – 10 – 21 ------ "
1880. – 8 – 24 ------ "
" – 11 – 9 ------ "
1881. – 5 – 3 ------(Official Gazette).
" – 7 – 14 ------ "

(6.) "Harness air-pad":

1880. – 4 – 6 ------(Monthly vols.)

(7.) "Horse-collar pad":

1877. – 5 – 8 ------ "
" – 5 – 26 ------ "

577 (8.) "Horse neck-protector":

1867. – 1 – 8 ------No. 61016.

(9.) "Neck pad":

1869. – 5 – 4 ------No. 89646.

(10.) "Pad":

1873. – 12 – 16 ------(Monthly vols.)

(11.) "Shoulder pad":

1873. – 12 – 16 ------ "
1878. – 8 – 20 ------ "
1881. – 1 – 2 ------ "
" – 1 – 4 ------ "
" – 2 – 22 ------ "

(12.) "Sweat pad":

1873. – 5 – 20 ------ "
1876. – 3 – 21 ------ "

Respectfully, E. P. ROBBINS.

[Endorsed:] U. S. Patent Office. Apr. 24, 1882.

578 Room No. 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *May* 5, 1882.

Edward L. McClain, care E. P. Robbins, Apollo building, Cinn'i, O.

Horse-collar pads. Apr. 24, 1882. # 59354.

In treating this matter applicant is advised that the subject-matter presented in the 2d clause of claim involves no more than a common mechanical expedient, and hence cannot be entertained as entitled to protection. It is common to provide a connecting device for securing the pad and collar together at this point. See Walsh, of Dec. 27, 1870, # 110,518, horse collars. The 1st & 3d clauses of claim appear to cover all of patentable novelty involved.

J. P. CHAPMAN, *Ex.*

[Endorsed:] 59354. $\frac{6}{2}\frac{4}{3}\frac{3}{3}$. E. L. McClain. 1. May 5th, 1882. 1.

579 To the Commissioner of Patents:

Your communication of May 5th, 1882, relative to the pending application (serial) No. 59354 for a patent for improvements in horse-collar pads, filed April 24th, 1882, by Edw. L. McClain, of Greenfield, Highland Co., Ohio, per E. P. Robbins, his attorney, is received.

In answer I hereby authorize the Commissioner of Patents to amend said application.

May 16, '82. Strike out clause 2nd of claims, being: "(2). As an attachment to a sweat or other horse-collar pad, the choke-strap billet-loop *l*, substantially as described and for the purposes set forth;" the reason therefor being that the U. S. Patent Office has ruled that said loop *l* "is a common mechanical expedient," and not patentable.

Signed at Cincinnati, in the county of Hamilton and State of Ohio.

EDWARD L. McCLAIN,
By EDWARD P. ROBBINS, *M. E.*,
His Attorney-in-Fact.

[Endorsed:] 59354. $\frac{6}{2}\frac{4}{3}\frac{3}{3}$. E. L. McClain. Am'd't. May 16, '82. (Patent Office U. S., May 15, 1882.) 2.

580 (2-024.)

Serial No. 59354.

Issue division. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *May 19th*, 1882.

E. L. McClain, c. o. E. P. Robbins, Apollo b'ld'g, Cinn., Ohio.

SIR: Your application for a patent for an improvement in pads for horse collars, filed April 24th, 1882, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run, but to do this properly applicants will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, photolithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor and title of invention as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the names of the assignees.

If you desire to have the patent issue to assignees an assignment containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully,

E. M. MARBLE,
Commissioner of Patents.

[Written across the face in red ink:] ☞ In remitting the final fee give the serial number at the head of this notice.

[Written on the margin in red ink:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same satisfactory reasons must be given therefor on or before the payment of the final fee.

581 $20 p'd. B.

CINCINNATI, O., *May 25th*, 1882.

To the Commissioner of Patents:

Enclosed please find a P. O. money order for twenty dollars ($20.00), which is the final fee now due for the application of Edward L. McClain (of Greenfield, Highland Co., O.) for a patent for an improvement in "pads for horse collars," allowed May 19th, 1882, filed April 24th, 1882, serial No. 59354.

EDWARD P. ROBBINS, *His Att.*

[Endorsed:] B. 100,095. R. U. S. Patent Office. Received May 29, 1882.

582 Serial No. 59354. Ex'r Book No. 44/13.
1882.
Patent No. 259,700. Chapman.

Edward L. McClain,
Of Greenfield,
County of Highland,
State of Ohio.
Invention, horse-collar sweat pads.

Parts of application filed.
- Petition, April 24, 1882.
- Affidavit, " " "
- Specification, " " "
- Drawing. " " "
- Model not required.
- Specimen, ——.
- First fee, cash, $15, April 24, 1882.
- " " cert, ——.

App. filed complete April 24, 1882.
2. Examined May 17, Chapman, 1882.
Countersigned May 19, '82: J. W. Babson, for Commissioner.
Notice of allowance, May 19, 1882.
Final fee, cash, $20, May 29, 1882.
3. " " cert., ——, 188–.
Patented June 20, 1882.
Att'y or P. O. address, Edw. P. Robbins, "Apollo building," Cinn., Ohio.

583 1882.

Contents. C.

Application papers.
1. 1 May 5, 1882.
2. Am'd't May 16, '82.
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12. 54 harness, horse collars.
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Title: Improvement in pads for horse collars.
Ex'd: E. L L.; K. E.

[Endorsed:] 15365. D., '86.

585 UNITED STATES PATENT OFFICE.

EDWARD L. MCCLAIN, of Greenfield, Ohio.

Pad for Horse-Collars.

Specification forming part of Letters Patent No. 259,700, dated June 20, 1882; application filed April 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented a new and useful horse-collar sweat-pad, of which the following is a specification.

My invention relates to that class of horse-collar pads which are placed between the collar and the horse's shoulders, and are adjustably attached to the collar and known as "sweat-pads."

The object of my invention is to produce a sweat-pad for a horse-collar which can be easily and readily attached to or taken from the collar, and which can be fitted to collars varying in size.

(Here follows diagram marked p. 584.)

Figure 1 is a view of my sweat-pad shown in connection with those portions of a horse-collar which will best illustrate the use of my improvements. Fig. 2 is a perspective view, showing one of the steel springs as attached to the pad. Fig. 3 is a view of the section of the pad coincident with the plane touching the side of the spring, and is intended to show how the springs are attached to the pad. Fig. 4 shows the gullet of the pad with the billet-loop *l* for the choke-strap billet attached thereto.

(No Model.)

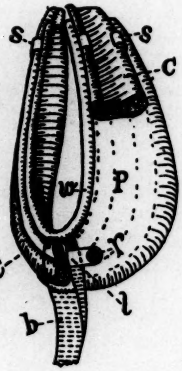
E. L. McCLAIN.

584

PAD FOR HORSE COLLARS.

No. 259,700. Patented June 20, 1882.

Fig. 1.



No. 348.
McClain
v.
Ochmayer
et al.
p. 584

Fig. 4.

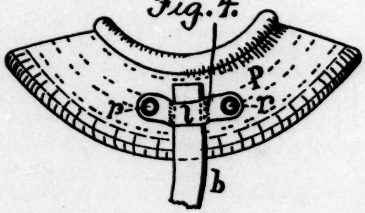
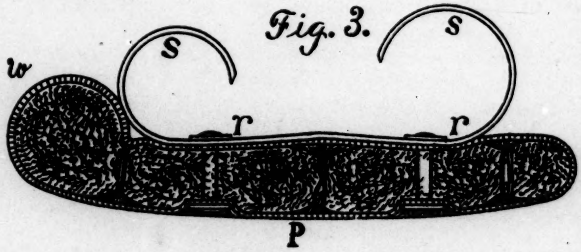


Fig. 2.

Fig. 3.



Witnesses:
Frank Blazer
A. W. Mackerley

Inventor:
Edward L. McClain
by E. P. Robbins,
att.

The pad proper is made so as to form an intermediate cushion between the collar and the horse's shoulders and of a size such as to entirely isolate the collar from all portions of the horse's shoulders. The surface material is made of suitable coarsely-woven material, such as bag-cloth, which, besides absorbing moisture, will be permeable to air. The pad is plain, with the exception of a fore wale or small roll, *w*, and is stuffed with hair and is stitched in the usual manner.

The sweat-pad, as just described, is not claimed as a new invention. My improvements consist in the addition of springs *s s* and choke-strap billet-loop *b*. The top ends of the pad sides or bodies are adjacent the withers of the neck, and are provided with elastic springs—steel—which are so made as to be capable of being opened and then clasped round the body of the sides of the collar. Thus one end of a spring is so curved as to partly encircle the fore wale or small roll of the collar and to hug it so closely as to keep out of the way of the hame, and the other end is so curved as to similarly partly encircle and hug the after wale or body side of the collar and yet not interfere with the hame. Such construction will enable the pad to be easily and readily attached at its top ends to the top ends of the collar, and also will permit of attachment at variable positions along the sides of the collar, so that it can be easily fitted in collars of different sizes.

The choke-strap billet-loop *l* is intended to serve to attach the gullet of the pad to the gullet of the collar, while permitting the billet of the choke-strap to encircle the gullet of the collar and not that of the pad, and hence be isolated by the pad as a cushion from coming in contact with the horse's neck.

Where no choke-strap is used a billet can be used to keep the pad in position at the gullet, or the loop need not be employed, as the springs will keep the pad fast to the collar.

In the figures, P indicates the pad; C, the collar; *w*, the fore wale of the pad; *s s*, the elastic springs; *l*, the choke-strap billet-loop; *b*, the choke-strap, and *r r* the rivets used to attach the springs or the loop to the pad.

In Fig. 3 the method of attaching the springs to the pad is shown, and also the shapes of the curved elastic clasps or springs. As may be seen, the rivets *r r* pass entirely through the pad and springs *s s* in such a manner as while securing the springs to the body of the pad, at the same time serve to bind the two sides of the body of the pad firmly together, and hence make that part of the pad to which the springs are attached extra strong and firm; but it would not deviate from my invention to pass the rivets through the surface material in contact with the springs alone, or to use a stiffening-piece on the inside or outside of said surface-piece, or between the two surface-pieces, or both between and without said surface-pieces

In Fig. 4 the method of attaching the choke-strap billet-loop to the gullet of the pad by means of rivets is illustrated, and what is asserted in the preceding paragraph as to the attachment of the springs by means of rivets is true in reference to the attachment of

said loop by means of rivets, but at the same time other
586 methods of attaching the loop—as by stitching—may, if desirable, be employed. I think leather the best material for said loop.

What I claim as new, and desire to secure by letters patents, is—

1. As attachments to a sweat or other horse-collar pad, the elastic springs *s s*, substantially as described, and for the purposes set forth.

2. The combination, in a sweat or other horse-collar pad, of the springs *s s* and of the choke-strap billet-loop *l* with the collar-pad, substantially as decribed, and for the purposes set forth.

EDWARD L. McCLAIN.

Witnesses:
FRANK BLAZOR.
A. M. MacKERLEY.

587 (2–175.)

[In pencil:] Banning. 15365.

DEPARTMENT OF THE INTERIOR,

[Vignette.]

UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file wrapper and contents in the matter of the letters patent granted Edward L. McClain November 7th, 1882, number 267,011, for improvement in pad for horse collars.

In testimony whereof I, M. V. Montgomery, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 28th day of July, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

Seal Patent Office, United States of America.

M. V. MONTGOMERY,
Commissioner.

588 $15, P. O. CINCINNATI, O., *Aug.* 5, 1882.

To the Commissioner of Patents:

Enclosed please find fifteen dollars ($15.00) as first fee on my application for a patent for improvement in "pads for horse collars and other parts of harness."

The application was sent by express from Greenfield, Highland Co., O., Aug. 9, 1882.

EDWARD L. McCLAIN.
Per EDWARD P. ROBBINS,
His Attorney.

[Endorsed:] U. S. Patent Office, Aug. 11, 1882.

1 dr.

589 *Petition, with Power of Attorney.*

To the Commissioner of Patents:

Your petitioner, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, prays that letters patent may be granted to him for the improvement in pads for horse collars and other parts of harness set forth in the annexed specification; and he hereby appoints Edward P. Robbins, M. E., of the city of Cincinnati, State of Ohio, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

EDWARD L. McCLAIN.

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590 *Specification.*

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented new and useful pads for horse collars and other parts of harness, of which the the following is a specification:

Canceled by sub. spec., am'd't (1), Sept. 21, '82.

My invention relates to methods of attaching pads to horse collars and to other parts of harness where adjustable or temporary pads are used.

The object of my invention is to furnish more perfect methods of adjustably attaching pads to horse collars than those yet devised, and the methods now to be described are improvements upon those described and claimed in my patent for "pads for horse collars," dated May 19th, 1882, reference to which should be made in order to better understand the methods herein described; and it is also my object to make such methods applicable to other harness pads.

591 While my improvements are intended to be applicable to various kinds of pads for horse collars and other parts of harness they are especially intended to apply to sweat or cushion pads, which are placed beneath or under the whole of the collar and entirely isolate the collar from the horse's shoulders and neck.

Fig. 1 shows a section of such a pad, P, with a fore roll, and to which is attached a curved metallic spring, S, which is so curved as to partly encircle and hug the fore roll of the horse collar C so as to hold that portion of the pad securely to the collar and yet not interfere with the hame.

Words and sentences enclosed between rules erased in copy.

Said spring S differs from the spring in my previous patent by having but one curved portion, intended for but one roll of the collar, instead of a curved portion for the fore roll and one for the back roll. The reason for using a single-roll spring is that such a spring is better adapted to collars of different kinds and sizes, than the two-roll spring.

The methods of attaching the single-roll spring are, however, as seen in Figs. 1 & 2, similar to those used for the two-roll springs in my previous patent.

I show in Figs. 1 & 2 a stiff-ning piece, *p*, of leather or other suitable material, to which the single-roll spring S is attached by means of the rivets *r r*, said rivets passing through
592 the spring and the stiff-ning piece, and said stiff-ning-piece is shown sewed to the outer surface material of the pad. But, as mentioned in my previous patent, the rivets *r r* may pass through the outer surface material of the pad proper, and may thus serve also to attach the stiff-ning piece to the pad.

If the rivets were so used it might not be necessary to sew the stiff-ning piece to the pad. Other rivets could be used to sew the stiff-ning piece to the pad.

Also the rivets can pass entirely through the pad, if desired, and hence secure the spring to both surface pieces of the pad and make the latter more firm at the place of attachment; and, further, a stiff-ning piece may not be used at all, or one may be used as shown in Figs. 1 & 2, or on the inside of either surface piece or of both surface pieces, or outside of the lower surface piece, or outside of both, or both beneath and without said surface pieces, and any or all of said stiff-ning pieces may be sewed or riveted to the pad and in any manner desirable. One, two, or more rivets could be used in a spring, as found practicable.

The pad to which such springs are applicable may be any sweat or cushion pad which separates the collar from all portions
593 of a horse's neck and shoulders, and which is open at the withers or top, at the gullet or bottom, or both at top and bottom, or which is not open at all, and any such pads or portions of pads may have fore rolls, back rolls, both fore rolls and back rolls, or no rolls at all.

These springs can also be used on pads which are placed beneath the collar, at the withers, or wherever a collar pad is used for isolating a portion only of a collar from the horse's neck or shoulders. They can also be used for attaching pads to other portions of harness, as to breast collars, &c. In any of these cases the springs could and would, of course, be so modified in form and proportion as to best suit the special use to which they are to be applied, and the methods of attaching them to horse-collar pads as just given will indicate methods of attachment suitable for any of the applications to which they may be suitable.

Words and sentences enclosed between rules erased in copy.

— the drawing, Figs. 3, 4, 5, 6, 7, and 8 show different arrangements of springs on collar pads without any rolls.

Fig. 3 shows a collar pad open at top, with a single-roll spring, *s*, attached to each side at the withers and a choke-strap billet loop, *l*, sewed or riveted to the gullet. Fig. 4 shows the
594 same pad with springs as before, but with one single-roll spring at the centre of the gullet instead of a loop, and which is intended to serve the same purpose as the loop, viz., to secure the gullet of the pad to that of the collar. If desired, two such single-roll springs can be used instead of but one, and in such case they would be placed one on one side and the other on the other side of a choke-strap billet, were a choke strap used.

Fig. 5 shows such a pad open at the bottom only, and with a single-roll spring, S, attached to each side at the bottom. A single-roll spring may be attached at the top, or one such spring may be attached to one side and another to the other side near the top.

Fig. 6 shows such a pad open at the bottom only and provided with two-roll springs at the top and single-roll springs at the bottom.

Fig. 7 shows such a pad open at both top and bottom or made in halves. Here each half has a single spring at the top and one at the bottom.

Fig. 8 shows such a pad continuous or open at neither top nor bottom, and such a pad may have one, two, or no single-roll springs at the top, or one, two or no single-roll springs at the bottom, or a combination of such arrangements of springs at the top
595 and the bottom, or of springs at the top and of a choke-strap billet-loop at the bottom.

Various combinations of the two-roll springs of my previous patent and of the single-roll springs of this patent with a collar pad may be made as found desirable and practicable, as by using one or two single roll springs instead of the choke-strap billet loop *l* in the previous patent, or by the use of a two-roll spring instead of a single-roll spring in any of the places where it could take the place of a single-roll spring in this patent, all of which combinations would be new and, I claim, covered by this patent.

It is to be understood that my springs are to be metallic or of any suitable elastic substance, and that the pads to which they are to be attached may be of any kind — material or construction whatever to which it would be suitable and desirable to attach such springs, and that I am to use such arrangements or combinations covered by my descriptions, drawings, and claims as may be most suitable, and that I am to attach my springs at any place on a pad, at, near, or between places mentioned or shown in this patent, as expediency may require.

Words and sentences enclosed between rules erased in copy.

596 *Claims.*

What I claim as new and desire to secure by letters patent is—

1. As an attachment to a horse-collar pad or other harness pad, and as a means of attaching a pad to a horse collar or other part of harness, the elastic single-roll [spring]* or single-curve spring S, constructed, arranged, attached, and operating substantially in the manner shown or described and for or with the purposes set forth.

2. The combination of one or two single-roll springs S, used at the bottom of a pad, and of two two-roll springs used at the top of the pad with a horse-collar pad open at the top, substantially in the manner shown or described.

3. The combination, with a horse-collar pad open at the top only, of single-roll springs S, attached at the top, and of a choke-strap billet loop *l*, attached at the gullet, as shown or described.

4. The combination, with a horse-collar pad open at the top only, of single-roll springs attached at the top and one or two
597 two-roll springs attached at the bottom, as shown or described.

5. The combination, with a horse-collar pad open at the bottom only, of one or two two-roll springs attached at the top and of two single-roll springs S S, attached at the bottom, as shown or described.

6. The combination, with a horse-collar pad open at the top and bottom or consisting of two parts, of two-roll springs attached at the top and of single-roll springs attached at the bottom or of the single-roll springs attached at the top and of the two-roll springs attached at the bottom, substantially as shown or described.

7. The combination, with a continuous horse-collar pad or one without any opening, of one or two two-roll springs attached at or near the top and of one or two single-roll springs attached at or near the bottom or of one or two single-roll springs attached at or near the top and of one or two two-roll springs attached at or near the bottom [substantial]* or of a single-roll spring at the top and a two-roll spring at the bottom or *vice versa*, substantially as shown or described.

598 8. The combination, with a horse-collar pad, as described, of elastic single-roll springs S, substantially in the manner shown or described and for the purposes set forth.

Inventor: EDWARD L. McCLAIN.

Witnesses:
HAROLD A. DICKEY.
A. M. MACKERLEY.

* Words enclosed in brackets erased in copy.
Words and sentences enclosed between rules erased in copy.

599 STATE OF OHIO, } ss:
Highland County, }

Edward L. McClain, the above-named petitioner, a citizen of the United States and resident of Greenfield, in the county of Highland and State of Ohio, being duly sworn (affirmed), deposes and says that he verily believes himself to be the original, first, and sole inventor of the improvement in pads for horse collars and other parts of harness described and claimed in the foregoing specification; that the same has not been patented in any country to himself or to others with his knowledge or consent, and I do not know and do not believe that the same was ever known or used prior to my invention thereof.

EDWARD L. McCLAIN.

Sworn to and subscribed before me this 9th day of August, A. D. 1882.

[L. S.] A. M. MACKERLEY,
Notary Public, Highland County, Ohio.

[Endorsed:] U. S. Patent Office. Aug. 11, 1882.

600 Room No. 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Aug.* 22, 1882.

Edward L. McClain, care Edw. P. Robbins, room 12, Apollo building, Cinn., Ohio.

Pads for horse collars. Aug. 11, 1882. # 69079.

The statements in the above-named case are so general and sweeping in terms that a definite, intelligent action cannot be had. There is no single unitary device accurately described, and applicant appears to entirely misapprehend the intent of the patent law, which is not designed to give protection for the use of an old device such as the spring shown in this case, but for the invention of some new and useful thing never before known or used. The form of spring shown is in common use for a variety of purposes, and, in view of applicant's former patent, it appears to involve here merely the question of double use. At all events, even if some novel result can
601 be shown for the combination of this form of spring with a collar pad, some positive and unequivocal structure must be shown and definitely and sharply defined and claimed. Seven different and arbitrary arrangements of the spring are shown and claimed, which, of course, are not legitimate in one application.

If, as before intimated, any patentable novely exists in the case, which as it is now presented is not disclosed, it is not of such character as to be expanded into eight broad claims for as many different arrangements of the spring.

JOHN D. HYER, *Ass't Ex'r.*

[Endorsed:] 69079. $11\frac{7}{12}\frac{3}{3}$. E. L. McClain. (1.) Aug. 22, 1882. (1.)

602 [On the margin:] E. P. Robbins, M. E., mechanical, patent, & inventor expert, Cincinnati, O., Apollo building.

Room 95.

CINCINNATI, O., *Sept. 2nd*, 1882.

To the Commissioner of Patents.

DEAR SIR: The communication of Aug. 22nd, in reference to the application for a patent for "pads for horse collars, &c.," No. 69079, filed 8. 11, '82, was duly received, and I shall now endeavor to respectfully meet the objections.

I think that if the office will patiently study my specification in connection with the following considerations and references the said objections will disappear, for I think that then it will be seen that the applicant has endeavored to so describe, claim, and define the limits of his invention that he will have done his whole duty as an applicant towards the Department.

The result of such a reconsideration will, I believe, show that the statements, although "general and sweeping in terms," are at the same time definite, especially as showing the comprehension by the applicant of the full appreciation and scope of his invention; and I understand that he fully fulfills his part in making an ap-
603 plication only when he is so explicit.

As to patentable novelty in the single-roll spring of my second patent (application), I have to offer the following argument, which would be the same argument which I should take to support the patent in court were it once allowed and were its validity questioned.

Considering the first patent, that of May 19th, 1882, which was referred to in my present application, for a two-roll spring, since a patent was allowed for it, that is *primæ facia* evidence that said spring or its equivalent, had not been known or used before in connection with harness and serving substantially the same functions, or in connection with any other articles of manufacture where it operated in substantially the same manner. Besides the applicant, previous to making his application, caused an exhaustive search to be made throughout the records which covered all classes and kinds of pads, and found that no device in any manner similar to either the one in applicant's existing patent or the one in his present
604 application had ever been described or patented.

It cannot be denied that if the applicant at the time of applying for his existing patent for the two-roll spring also had invented and appreciated the merits of the single-roll spring, he could have included the later in said patent as being one of two devices which would answer the same purpose and which might in certain cases be found to be the better, if not, perhaps, to be the only one which would answer. (Legal references to this doctrine will be given further on.)

In the Rules & Practice in the U. S. Patent Office, as revised Sept. 1st, 1880, on p. 17, under amendments of applications, sec. 59, there is a clause which reads:

"Matter not found in either involving a departure from the original invention can be shown or claimed only in a separate application."

Now, I understand by said section and said clause that new matter "involving a departure from the original invention," whether said new matter or invention was known at the time
605 of making the application or not, cannot be embodied in the original application, but that, nevertheless, the law and practice provides for protection for any such new matter by allowing said new matter to constitute the subject of a new or second application.

Had your applicant endeavored to have had included in an amend*mend*ment to his first application the new device, with new features, for which he now applies for a patent, I understand that it would have been the duty of the office to have objected to allowing such new and additional matter to be embodied in said application, but on account of the said proviso in said section 69 would have granted a patent for the same thing when applied for under a separate application, and it is not required that the said second application be filed in connection with the first or at a stated time thereafter.

Now, your applicant respectfully requests that the office show him, by reference to laws or practice, that the essence of the present application is not substantially identical with that
606 of an application to embody new matter which could not be included in an amendment to an original application, but for which said new matter there is provision for protection under an additional application.

The facts are that the applicant, in endeavoring to practice the invention in his existing patent, found that the two-roll spring was not generally applicable to collars of different sizes, as it had been supposed it would be; for it was found that the rolls in collars of different sizes and of different make varied so much that while it would make a pad applicable to collars of different sizes for light work, the same pad could not be used on collars for heavy work, and hence the invention proved to be imperfect. This resulted in the invention of the single-roll spring of the present application.

The applicant stated in his pending application that his object was "to furnish more perfect methods of adjustably attaching
607 pads to horse-collars than those yet devised, and the methods now to be described are improvements upon those described and claimed in my patent for pads for horse collars, dated May 19, 1882."

If the office should refuse to grant a patent for the improvement for the single-roll spring, since the two-roll spring is not generally applicable, and would consequently not have sufficient merits in itself to come into use, the office would thereby hinder the public

from the acquisition of a perfect device or from the use of a device embodying the principles therein existing.

Since, as stated above, an exhaustive search failed to show that either of the two said springs had been known or used for substantially the same purpose or in the same manner prior to my applications for patents for the same, your applicant respectfully requests that precise references be given him as to a prior knowledge or use of a single-roll spring operating in substantially the same manner and connected with the same line of manufacture. The ex-
608 isting patent is *primæ facie* evidence that the two-roll spring was not known or so used.

If a single-roll spring was ever known and so used before the granting of my patent for the two-roll springs, then the doctrine of "double use" with which the office, "in view of the applicant's (my) former patent," has opposed my right to a patent for the single-roll spring should have applied *vice versa* to my first application, and prevented the issuing of a patent for a two-roll spring.

But granting that a single-roll spring was not known and so used before, and that it is "in view of the applicant's (my) former patent" only that the question of "double use" is raised, then I would respectfully offer the following reasons to show that the doctrine of "double use" cannot apply to the single-roll spring as compared with the two-roll spring: 1st. Although the single-roll spring partly encircles and hugs the roll of a collar in precisely the same manner as does one curved end of the two-roll spring, and although it is used for the same purpose as the two-roll spring—that
609 is, as a means of adjustably attaching a pad to a horse collar—the single-roll spring operates in substantially a different and more advantageous manner than does the two-roll spring; for, since a two-roll spring has the two curved portions for clasping the two rolls of a collar rigidly attached to each other, the said two curved portions can only accommodate collars varying slightly in the size and shape of their cross-sections at the place where the springs are attached, and, consequently, if a two-roll spring suitable for collars varying in size, but intended for light work, were used on a collar pad and it was desired to use the same pad on collars of considerably larger cross-section, as for heavy work, then the same two-roll spring would not answer, and, consequently, a different or an extra spring would be required for the same pad. Again, were the pad proper worn out, the same spring could be placed on pads intended for the same class of collars only, while it might be desired to put them upon pads intended for collars of heavier or lighter work than that for which the old pads had formerly
610 been made.

Again, a horse collar, especially one used for heavy work, after extended use becomes distorted, in that the back roll or body side flattens out, and hence not only changes the shape of the back roll, but increases materially the width of the collar—the distance from the front side of the fore roll to the rear side of the back roll—so that the two-roll spring could not, in such cases, accommodate itself to the collar and would be imperfect where the rear single-

roll spring could be adjusted and placed farther back, thereby perfectly accommodating the pad to change of form and proportion in the collar.

And, further, the single-roll spring has the advantage that, in certain cases but one, such springs may answer the same purpose as the two-roll spring, and, since it requires less material and work in its manufacture, its expense to the user is correspondingly diminished.

Again, where two single-roll springs are used in place of one two-roll spring—that is, where one single-roll spring clasps the fore roll and the other the back roll of a collar—since the two
611 single-roll springs are not rigidly attached to each other, they can be placed at variable distances from each other, so that the same-sized springs can be used either on pads for light work or on pads for heavy work or the same pad may be changed to suit collars for heavy or for light work merely by adjusting the springs by placing them farther from or nearer to each other; and, again, when the pad proper is worn out the identical springs can be placed on pads intended for collars for either heavier or lighter work than that for which the old pad had been used. This is of advantage to the user in repairing a lot of old pads, and consequently prolonging their use.

These, then, are some of the most important advantages of the single-roll spring over the two-roll spring, and are what makes the former an improvement upon the latter. There are as good reasons why a patent should be allowed for the single-roll spring as those which allowed a patent for the use of hot blast instead of cold blast in iron manufacture, or the use of one metal for another or
612 of a gas flame instead of an oil flame for the same purpose.

As to a "positive and unequivical structure" being required to be shown, I have to say that the single-roll spring has but one elastic curved portion acting in a certain manner and independent of any similar portion, while the two-roll spring has two such parts rigidly connected together and acting in such a manner as that any deflection of one curved part will cause a certain amount of the strains within itself to be transmitted to the other part, so that the two said curved parts act together and always in conjunction with each other, while two single-roll springs may, when used together instead of but one two-roll spring, answer precisely the same purpose on the same pad and in connection with the identical collar. There is here used two devices instead of but one, and although either of the former might be considered as similar to either half of the latter, yet, since the two former devices act entirely independently of each other and the two halves of the latter can act only in connec-
613 tion with each other and in such a manner that any strains in one half will be transmitted to the other half, the single-roll springs must be conceeded to be a structure positively and unequivocally different from the two-roll spring, while, when the single-roll spring is used alone to take the place of a two-roll spring, there is evidently then no question whatever as to one being positively and unequivically different from the other.

References on novelty and improvement: See "Curtis on Patents" (Geo. T. Curtis), 2nd edition, 1854, p. 27, note 1, last ¶, and mark the doctrine in the latter part commencing with, "If it is new," &c. (line 5).

Substitution of one metal for another, p. 29, § 8, line 6: "Thus," &c. (Grounds are that one is more useful and advantageous than the other.)

"Amount of invention may be estimated from the result," p. 36, § 14, with note 2. (I have shown that the single-roll spring makes generally applicable the principles envolved in the application of the two-roll spring wherein the two-roll spring would fail.)

614 Further, I refer in this connection to the test for utility, p. 36, § 15.

And, further, and also to cover the above principles, to p. 38, § 18.

See also p. 53, § 29.

" " " 30, § 8, line 2nd: "We are of opinion," &c., &c.

As to "no single unitary device" being "accurately described," I would respectfully request the office to re-examine the description of Figs. 1 & 2 in my application. I have in that connection indicated every manner of fastening the spring to a collar pad and by the use of one or more stiff-ning pieces as might be desired and found practicable.

The claims.—The various claims were made on the ground that the inventor is not only privileged, but is required, to point out all the various ways in which his invention is to be used.

My invention consists essentially in the use of a single-roll elastic spring for the purpose of adjustably attaching pads to horse

615 collars, and, since it would be of importance to know how generally applicable this would be, and since I would be required by law to describe all the known and the best methods of applying my invention, I have the right to claim under one patent all the uses or applications which I can make. (This doctrine will be referred to further on.)

The subject-matter of the application is a unit. It is a definite device, a certain spring as a means of attaching a pad to a horse collar, and all the combinations of that spring with a horse collar are for the same purpose and serve exactly the same functions, and said combinations are no more than the different definite means known to the inventor of putting the spring into use which the law requires and consequently must protect.

"It has been held that a patent may be taken * * * for two machines which are invented by the patentee and conduce to the same common purpose and object, although they are capable of a distinct use and application without being united together,"

616 &c., &c. (See whole of § 111, Curtis, p. 140.)

My several combinations constitute distinct modes by which I contemplate the application of my invention, "one of them being (or may be) preferable in certain circumstances to the other, and *vice versa*." Hence the unity of my subject-matter.

For a further consideration of this doctrine I respectfully refer the

office to Curtis, p. 141, note 1, 2nd ¶, which reads: "In Wyeth *v.* Stone, 1 Story, 288, in order to render different letters patent necessary, it is said the inventions must be wholly independent of each other and distinct inventions for unconnected objects, as one to spin cotton and another to make paper."

Also to the language and considerations of Mr. Justice Story, in note 1, p. 142, Curtis:

I desire to call attention to the fact that *he* learned judge here keeps continually in view the doctrine that a patent may be granted for and legally cover two entirely distinct devices for accomplishing the same end—that is, having the same purpose or functions.

617 In said note, p. 143, 2nd line from bottom of page, he says: "It is obvious, construing this language with reference to the case actually before the court, that the court were treating of a case where each of the patented machines might singly have a distinct and appropriate use and purpose, unconnected with any common purpose, and therefore each was a different invention."

I would call especial*l* attention, also, to the last part of the 1st ¶ of said note on p. 144, beginning "The case intended," &c., line 5 from bottom of the ¶.

Also to the second or following ¶.

" to the first 5 lines of the last ¶ of said note on p. 145.

Surely, if one patent can be for two distinct and complete machines for doing the same work, one patent could cover all the ways in which one machine or, in this case, one single piece can perform the same function.

It was upon this doctrine that I made the several distinct claims for combinations, all having the same purpose.

618 If I am wrong I would respectfully request the office to give me reference to any laws or practice which restricts the applicant in the number of distinct and separate claims in a patent, or, in other words, which would show that an applicant could not claim every combination of a given new device with other devices with which, and inseparably from which, it was to be used.

I would also call attention to the fact that all the claims for combinations consist substantially in the combination in a horse-collar pad of one or more of the single-roll springs with a horse-collar pad or of the single-roll springs with a collar pad having two-roll springs also.

If the office does not file this communication I respectfully request that it be signed as having been examined by the examiner and returned to the undersigned.

EDW. L. McCLAIN,
Per E. P. ROBBINS,
M. E., His Att.

E. P. Robbins, M. E., mechanical, patent, & inventor expert, Cincinnati, O.

[Endorsed:] U. S. Patent Office, Sep. 4, 1882. 69,079. $1\frac{17}{42}{}^{3}$. E. L. McClain. Att'y's letter. Sept. 4, 1882. (2.)

619 Room No. 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept.* 6, 1882.

Edward L. McClain, care Edw. P. Robbins, room 12, Apollo building, Cinn., Ohio.

Pads for horse collars. Aug. 11, 1882. 69079.

Referring to letter of attorney filed Sept. 4th inst., applicant is advised that under the law and practice criticisms contained in official letter of Aug. 22d ult. were correct and are reiterated. The case itself is evidence that the two forms of the spring are equivalent, since at least one of the pads shows both forms as means of fastening, showing their indiscriminate use. As before intimated, the mere arrangement of a given form of spring or a given number of them or their attachment to a given form of pad or a given number of pads of different forms is a mere matter of arrangement or use and not of invention and cannot legitimately form the subject-matter of separate and distinct claims for every distinct
620 and arbitrary arrangement which does not involve the question of patentable combination.

Each of the pads shown is distinct from every other pad and obnoxious to rules 40 & 41.

Relative to the expansion of a simple device into a multiplicity of claims see Carlton *vs.* Bokee, 2 O. G., 520; Woodruff, *ex parte*, 17 O. G., 453, and Dederick *vs.* Carroll, 20 O. G., 1233. The case should therefore be restricted to a single definite pad, and should be described and claimed clearly and without ambiguity before further definite action.

JOHN D. HYER,
Ass't in Charge.

[Endorsed:] 69079. $\frac{117}{42}$. E. L. McClain. 2. Sept. 6. 1882. (3.)

621 Room 95.

OFFICE OF ATTORNEY,
CINCINNATI, O., *Sept.* 18, 1882.

To the Commissioner of Patents.

"Pads of horse collars," &c. Application No. 69079. Filed 8, 11, 1882.

DEAR SIR: The office letter of Sept. 6th, 1882, was duly received, and the attorney subsequently personally met the applicant and found that through correspondence he had slightly misunderstood the intention of said applicant, and consequently had not been able to represent fairly his client, and that as the case now stands it will be necessary to satisfy the applicant and the office that a new application be substituted for the one at present pending, and the at-

torney therefore now requests the office to substitute the accompanying application—new specification, claims, and drawing—for the one now under consideration, and for the following reasons:

622 The attorney and applicant had the same opinion in reference to the different arrangements of springs on collar pads as expressed by the examiner in office letter of Sept. 6th inst., vis., that "the mere arrangement of a given form of spring or a given number of them or their attachment to a given form of pad or a given number of pads of different forms is a mere matter of arrangement or use and not of invention;" and it was because the attorney and applicant understood that the attachment of a given form of spring "to a given form of pad or a given number of pads of different forms" was "a mere matter of arrangement or use and not of invention" (quotation from office letter); that they believed their patent should cover all such arrangements or use of their invention, the spring; and in view of the examiner's remarks, as just quoted, they adhere to the same opinion, and consequently have decided that they will receive equally as full protection by making a claim for the spring and one claim only for a combination of said spring with a collar pad and describing merely the various arrangements and uses in the specification.

623 The attorney considers it important to make some explanations and references as evidence of good faith on the part of the applicant in requesting the substitution of new specification, claims, and drawing for the pending application.

1st. The different styled springs—single-roll and two-roll—cannot be used "indiscriminately," as was stated in office letter of Sept. 6th; and the new specification was written in such a manner as to embody, itself, clear distinctions between the new and old form of spring and to make the advantages of the improvement more apparent.

At the bottom of p. 5 of attorney's first letter statements were made to show that "the two-roll spring was not generally applicable to collars of different sizes," and I desire now to state that this had especial reference to the back rolls of such collars, as is evident from an inspection of Fig. 3 of the new application.

624 It was the intention of the applicant to use the single-roll spring on the fore roll only.

A study of the attorney's letter would indicate that he endeavored to show advantages of the use of a single-roll spring for the back roll in connection with one for the fore roll over the use of a two-roll spring were a single-roll spring to be used for the back roll, as the attorney then understood might be desired.

As to a "positive and unequivocal structure" being required to be shown, an argument was advanced commencing at the middle of p. 12, and by referring to the same it will be seen that the attorney had it especially in mind to show such difference in structure were a single-roll spring to be used at any time on a back roll in conjunction with one for the fore roll and at the same cross-section of a pad, and the attorney, in closing that part of his argument (p. 13, line 6, from "while when, &c."), made reference to a single-curve spring

being "used alone" (on the fore roll only, as shown by the drawings of the (first) pending application), and in that case considered
625 no argument for a "positive and unequivocal structure" necessary, considering the difference as being self-evident.

By referring to p. 19 of the same it will be evident that the attorney and the applicant always considered pads open at top or bottom or both top and bottom or not at all as being equivalent devices, differing in said particulars only for purposes of convenience of use in connection with collars which were opened at top or bottom or not at all, and that, while the attorney had made mention in the descriptive part of the specification of various arrangements of springs on pads open at top or bottom or both top and bottom or not at all, the object of making a number of claims for combinations was to make the patent more complete, but not to endeavor to cover a number of distinct inventions or "patentable combinations" under one patent.

EDWARD L. McCLAIN,
Per E. P. ROBBINS,
M. E., His Att.

626 *Petition, with Power of Attorney.*

To the Commissioner of Patents:

Your petitioner, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, prays that letters patent may be granted to him for the improvement in pads for horse collars and other parts of harness set forth in the annexed specification, and he hereby appoints Edward P. Robbins, M. E., of the city of Cincinnati, State of Ohio, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

EDWARD L. McCLAIN.

627 *Specification.*

To all whom it may concern:

Sub. spec. am'd't (1), Sept. 21, '82.

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented new and useful pads for horse collars and other parts of harness, of which the following is a specification:

My invention relates to a device for [methods of]* attaching pads to horse collars and other parts of harness where adjustable temporary pads are used.

* Words enclosed in brackets erased in copy.

The object of my invention is to furnish more perfect [methods]* means A of adjustably attaching pads to horse collars than those yet devised, and the [methods]* means A now to be described are improvements upon those described and claimed in my patent for "pads for horse collars," dated May 19th, 1882, reference to which should be made in order to better understand the [methods]* means A herein described; and it is also my object to make such [methods]* means A applicable to other harness pads.

628 While my improvements are intended to be applicable to various kinds of pads for horse collars and other parts of harness, they are especially intended to apply to sweat or cushion pads which are placed beneath or under the collar and isolate the collar from the horse's shoulders and neck.

Fig. 1 is a sectional view of a pad and a collar coincident with one side of the spring S. Fig. 2 is a perspective view of a portion of a pad with spring S attached.

Fig. 1 shows a section, P, of such a pad, with a fore roll, and to which is attached a curved metallic spring, S, [which]* which is so curved as to partly encircle and hug the fore roll of the horse collar C, so as to hold that portion of the pad securely to the collar and yet not interfere with the hame. Said spring S differs materially from the spring in my previous patent. First, this spring has but one curved portion, intended for the fore roll only of the collar, instead of a curved portion for the fore roll and one for the back roll. The single-roll spring is applicable where the two-roll spring could not be used, and is preferable and cheaper even where the latter can be used.

629 By referring to Fig. 3 it will be easily seen that the fore roll *f* is approximately of uniform size in cross-section in the same collar, while the back roll *b* varies considerably in the size of its cross-sections 1, 2, 3, 4, 5, 6, &c., increasing continually to near the bottom, where it gradually narrows again until it becomes quite small at the gullet. Hence it is seen that the spring S can be as easily placed around the fore roll at one position as at another—at the top, side, or bottom; but when a two-roll spring is used, while the curve for the fore roll will fit that roll at any position along the side of the collar, the curve for the back roll will fit that roll properly only when used in approximately the same position—at the same cross-section of that roll; and it should here be noticed that the use of a curved elastic spring as a means of adjustably attaching a pad to a horse collar is not so much that said spring can be adjusted to fit different-sized collars as that such a spring enables the pad to be attached to or

* Words enclosed in brackets erased in copy.

disengaged from a collar with ease and in the quickest manner possible.

Fig. 4 shows how a pad with a single-roll spring is attached or disengaged. The outer end of the spring is placed against the fore roll at or near the seam at the side of that roll, and
630 then that portion of the pad is so moved that the spring rotates about said end until it comes in position around the fore roll, and that without deflecting much the curvature of said spring.

The pad is disengaged from the collar by reversing the latter operation.

Now, were it desired to similarly put a two-roll spring on a collar we would commence, as shown in Fig. 5, and rotate it into position, as shown in Fig. 6; but in order to put said spring on in that manner the roll curves would have to be considerably deflected, as seen in Fig. 6, while the user would be as likely to attempt putting such a spring on the collar by bending both curves back, as shown in Fig. 7, until they would go on the collar without rotating any whatever. It is therefore seen that the two-roll springs are much more cumbersome to use than single-roll springs, while when the curves of the two-roll springs are repeatedly and much bent they lose their elasticity, and consequently their usefulness.

Fig. 3 shows a horse collar having attached to it a pad provided with single-roll springs, and shows also by means of the dotted lines the outline of a larger or longer collar simi-
631 larly placed, and how such a collar pad could be fitted to a larger collar.

The methods of attaching the single-roll springs are, however, as seen in Figs. 1 and 2, similar to those used for the two-roll springs in my previous patent.

I show in Figs. 1 and 2 a stiff-ning piece, *p*, of leather or other suitable material, placed between the spring S and the surface material of the pad P. The spring may be attached by passing rivets *r r* through the spring and stiff-ning piece and then sewing the stiff-ning piece to the surface material of the pad, as shown in Fig. 2, or by passing the rivets *r r* through the spring, stiff-ning piece, and the surface material of the pad, as shown in Fig. 1.

Also, as in my previous patent, the rivets *r r* may be passed entirely through the pad, if desired, and hence secure the spring to both surface pieces of the pad and make the latter more firm at the place of attachment; but a stiff-ning piece may not be used at all or one may be used, as shown in Figs. 1 and 2, or on the inside or outside of either surface piece or of both surface pieces as found desirable and practicable.

The pad to which such springs are applicable may be any
632 sweat or cushion pad which separates the collar from all portions of a horse's neck and shoulders, and which is open at the withers or top, at the gullet or bottom, or both at top and bottom, or which is not open at all, and any such pads or

portions of pads may have fore rolls, back rolls, both fore rolls and back rolls, or no rolls at all.

These springs can also be used on pads which are placed beneath the collar, at the withers, or wherever a collar pad is used for isolating a portion only of a collar from the horse's neck or shoulders. They can also be used for attaching pads to other portions of harness—as to breast collars, &c., &c.

Some horse collars are made to open at the top and others at the bottom, and in being used they are sometimes opened on being removed from a horse's neck and are again fastened on being replaced. Sometimes they are not opened at all, but are removed or replaced by being slipped over the horse's head.

It is common to make pads of the same kind to open at the top and others to open at the bottom or not to open at all to suit the kind of collar with which they are to be used or the habits of the user.

633 As previously mentioned, my single-curved springs are equally well adapted to any such pads.

A great feature possessed by pads having the single-curved springs is that they can be easily and speedily removed from or attached to a collar, and therefore can be separated from the collar when it is removed from a horse's neck; or the pad need not be disengaged from a collar at all, since the pad will remain attached by means of the springs to the collar when the latter is slipped over a horse's head; or, since a pad open at top can be used with a collar open at top, or a pad open at bottom with a collar open at bottom, and, further, since any such pad can be easily and speedily removed from or attached to a collar, it can be used with any style of collar, and therefore has general use.

As an article of manufacture the single-roll spring can be made and attached to a pad at much less expense than a two-roll spring. First, it does not require so much material; second, it is easier to form and may not require tempering, as the tempered steel in the market may answer where it has been found that such steel will not do for a two-roll spring; third, it is more convenient to attach by riveting by hand or

634 by machinery, for riveting machinery now in use can be used on a single-roll spring, but not on a two-roll one, since the curved ends of the latter project over the rivets.

It is to be understood that my springs are to be metallic or of any suitable elastic substance, and that the pads to which they are to be attached may be of any kind, material, or construction whatever to which it would be suitable and desirable to attach such springs, and that I am to use such arrangements as may be most suitable.

I claim—

1. As an attachment to a horse-collar pad or other harness pad, and as a means of adjustably attaching a pad to a horse collar or other part of harness, the elastic single-roll or

single-curve spring S, constructed, arranged, attached, and operating substantially in the manner shown or described, and for or with the purposes set forth.

2. The combination, with a horse-collar pad, of elastic single-roll or single-curve spring S, substantially in the manner shown or described, and for the purposes set forth.

Inventor, EDWARD L. McCLAIN.

Witnesses:
A. M. MACKERLEY.
WM. CLAUSER.

635 *Oath.*

STATE OF OHIO, *Highland County,* } ss:

Edward L. McClain, the above-named petitioner, a citizen of the United States and resident of Greenfield, in the county of Highland and State of Ohio, being duly sworn, deposes and says that he verily believes himself to be the original and first and sole inventor of the improvements in pads for horse collars and other parts of harness described and claimed in the foregoing specification; that the same has not been patented in any country to himself or to others with his knowledge or consent; and I do not know and do not believe that the same was ever known or used prior to my invention thereof.

EDWARD L. McCLAIN.

Sworn to and subscribed before me this 19th day of September, A. D. 1882.

[L. S.] A. M. MACKERLEY,
Notary Public, H. Co., O.

[Endorsed:] U. S. Patent Office, Sep. 21, 1882. 69079. $1\frac{17}{42}$. E. L. McClain. Sub. spec. & letter. Sept. 21, '82. 4.

636 Room No. 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept.* 23, 1882.

Edward L. McClain, care E. P. Robbins, room 12, Apollo building, Cinn., Ohio.

Pads for horse collars. Aug. 11, 1882. 69079.

The amended specification and drawing have been admitted in above-named case.

The specification, however, seems unnecessarily prolix, and the oath is defective, as it does not state whether or not the device has been in public use or on sale in the U. S. for more than two years. The spring is an ordinary one, and, independent of the pad, is not patentable.

The 1st claim is therefore rejected.

With the word "the" inserted before elastic in second clause it may, perhaps, be admissible.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CAPMAN, *Ex.*

[Endorsed:] 69079. $\frac{11}{12}\frac{7}{8}$. E. L. McClain. 1. Sept. 23, 1882. (5.)

637 Room 95.

OFFICE OF ATTORNEY, APOLLO BUILD'G,
CINCINNATI, O., *Sept. 25th*, 1882.

To the Commissioner of Patents.

DEAR SIR: The office letter of Sept. 23d inst., 1882, states that "the spring (in the application of Edw. L. McClain for a patent for an improvement in 'pads for horse collars and other parts of harness,' substituted Aug. 11, 1882) is an ordinary one, and independent of the pad is not patentable."

In answer to the same I would respectfully state that claim 1 is written in good English, and if the examiner will take the trouble to read said claim once carefully he will see that the spring is claimed "as an attachment to a horse-collar pad or other harness pad," &c., and consequently is not a claim "independent of the pad" or of harness pads. Said claim cannot for such reasons be rejected.

638 The applicant's attorney, in his letter filed Sept. 4th, on p. 7, 2nd ¶, "Since as," &c., requested "that precise references be given him as to a prior knowledge or use of a single-roll spring operating in substantially the same manner and connected with the same line of manufacture." No attention has been given said request.

The attorney now requests that said references be given, or, if they are not, he will hold and maintain, according to sec. 65 of "Rules of Practice" of Sept., 1880, that claim 1 should be allowed.

The attorney now authorizes the insertion of the word "the" just preceeding the word "elastic" in said claim 2 referred to in said office letter.

Also the insertion in said oath referred to in same letter "that the same has not to his knowledge been in public use or on sale in the United States for more than two years prior to this application." But in regard to the omission of said clause in said oath the attorney has to say that while rule 39, as amended Sept. 1st, 1880, requires that "the applicant must distinctly state under oath," said

639 clause, the new form of oath which is required to be substituted "for forms 17 and 18, p. 61, Rules of Practice U. S. P. O.," in note 7 to form of oath, distinctly commands to "erase the words 'that the same has not to — knowledge been in public use or on sale in the United States for more than two years prior to this application.'"

While said clause evidently should be always inserted, the attor-

ney, for the reasons just given, never has inserted it, and the objection has not been previously raised, not even in the present class.

Very respectfully,

EDWARD L. McCLAIN,
Per E. P. ROBBINS, *His Att.*

[Endorsed:] U. S. Patent Office, Sept. 27, 1882.

640–649 Room No. 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept.* 28, 1882.

Edward L. McClain, care Edw. P. Robbins, room 12 Apollo building, Cinn., Ohio.

Pads for horse collars. Aug. 11, 1882. # 69079.

The paper filed Sept. 27th inst. has not been made a part of the record of the case, for the reason that there is no known provision of law by which a man can amend his oath. The present rule requires the applicant to swear that his invention has not been in use or on sale in the United States for more than two years, and a supplemental oath should be filed. The former action of the office relative to first clause of claim is correct.

A mere state- that the spring is adapted for use with a pad renders it no less a claim for a spring alone. The mere double use of a device is not patentable, and the only novelty in the case is the combination of the spring and pad.

650 If applicant should desire a reference to the spring it will be furnished.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CHAPMAN, *Ex.*

[Endorsed:] 69079. $1\frac{17}{42}{}^{3}$. Edward L. McClain. 2. Sept. 28, 1882.

651 Room 95.

CINCINNATI, O., *Sept.* 30, 1882.

To the Commissioner of Patents.

DEAR SIR: Edward L. McClain, who filed an application Aug. 11, '82, for a patent for improvement in "pads for horse collars," &c., respectfully requests any references which the office can furnish him of a prior use of the spring shown, described, and claimed in said application which is of such a nature as to prevent its being claimed in said application.

Very respectfully,

EDW. L. McCLAIN,
Per E. P. ROBBINS, *Att.*

[Endorsed:] U. S. Patent Office, Oct. 2, 1882. 69079. $1\frac{17}{42}{}^{3}$. E. L. McClain. Att'y's letter. Oct. 2, '82. 7.

652 *Oath.*

STATE OF OHIO, }
Highland County, } ss:

Edward L. McClain, the above-named petitioner, a citizen of the United States and resident of Greenfield, in the county of Highland and State of Ohio, being duly sworn, deposes and says that he verily believes himself to be the original, first, and sole inventor of the improvement in "pads for horse collars and other parts of harness" described and claimed in the foregoing specification; that the same has not been patented in any country to himself or to others with his knowledge or consent; that the same has not to his knowledge been in public use or on sale in the United States for more than two years prior to this application, and I do not know and do not believe that the same was ever known or used prior to my invention thereof.

EDWARD L. McCLAIN.

Sworn to and subscribed before me this 2d day of October, A. D. 1882.

[L. S.] A. M. MACKERLEY,
Notary Public, H. Co., O.

[Endorsed:] U. S. Patent Office, Oct. 4, 1882. 69075. $1\frac{1}{12}\frac{1}{8}$. E. L. McClain. Sup'l oath. Oct. 4, 1882.

653 (2-024.)

Serial No. 69079.

Issue division. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *Oct.* 9, 1882.

Edward L. McClain, c. o. E. P. Robbins, room 12, Apollo. bl'k, Cinn.

SIR: Your application for a patent for an improvement in pads for horse collars, filed Aug. 11, 1882, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897 Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run; but to do this properly applicants will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, photo-lithographing, and engrossing of the sev-

eral patent parts preparatory to final signing and sealing will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor and title of invention as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the name of the assignees.

If you desire to have the patent issued to assignees an assignment, containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully,

E. M. MARBLE,
Commissioner of Patents.

[Written across the face in red ink:] ☞ In remitting the final fee give the serial number at the head of this notice.

[Written on margin in red ink:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same satisfactory reasons must be given therefor on or before the payment of the final fee.

654 Room 95.

$20, P. O. B.

CINCINNATI, O., *Oct.* —, 1882.

To the Commissioner of Patents.

DEAR SIR: Enclosed you will please find the final fee of twenty dollars ($20.00) for application (serial No. 69079) filed Aug. 11, 1882, allowed Oct. 9th, 1882, for "pads for horse collars," to Edward L. McClain, which I send by postal money order.

EDWARD L. McCLAIN,
Per E. P. ROBBINS, *Att.*

[Endorsed:] U. S. Patent Office, Oct. 14, 1882.

655 Serial No. 69079. Ex'r Book No. $11\frac{1}{12}$.

1882. Chapman.

Patent No. 267,011.

Edward L. McClain,
Of Greenfield,
County of Highland,
State of Ohio.
Invention, pads for horse collars, &c.

Parts of application filed.
Petition, Aug. 11, 1882.
Affidavit, " " "
Specification, " " "
Drawing, " " "
Model, not required.
Specimen, ——.
First fee, cash, $15, Aug. 11, 1882.
" " cert., ——.

App. filed complete Aug. 11, 1882.
Examined Oct. 5, 1882. Chapman, ex.
2. Countersigned Oct. 7, '82. J. W. Babson, for Commissioner.
Notice of allowance, October 9, 1882.
Final fee, cash, $20, Oct. 14, 1882.
3. " " cert., ——, 188–.
Patented Nov. 7, 1882.
Att'y or P. O. address, Edw. P. Robbins, room 12 Apollo build'g, Cinn., Ohio.

656 1882.

Contents. G.

Application papers.
1. 1 Aug. 22, 1882.
2. Att'y's letter, Sept. 4, '82.
3. 2 Sept. 6, 1882.
4. Sub. spec. & letter, Sept. 21, '82.
5. 1 Sept. 23, 1882.
6. 2 " 28, 1882.
7. Att'y's letter, Oct. 2, '82.
8. Sup'l oath, Oct. 4, '82.
9.
10.
11.
12.
13.
14.
15. 54 harness.
16. Horse collars.
17.
18.
19.
20.

Title: Improvement in pads for horse collars.
Ex'd: H. M. H.; G. W.

658 UNITED STATES PATENT OFFICE.

EDWARD L. MCCLAIN, of Greenfield, Ohio.

Pad for Horse-Collars.

Specification forming part of Letters Patent No. 267,011, dated November 7, 1882; application filed August 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented new and useful pads for horse-collars and other parts of harness, of which the following is a specification.

My invention relates to a device for attaching pads to horse-collars and other parts of harness where adjustable temporary pads are used.

The object of my invention is to furnish more perfect means of adjustably attaching pads to horse-collars than those yet devised, and the means now to be described are improvements upon those described and claimed in my patent for "pads for horse-collars," dated May 19, 1882, reference to which should be made in order to better understand the means herein described; and it is also my object to make such means applicable to other harness-pads.

While my improvements are intended to be applicable to various kinds of pads for horse-collars and other parts of harness, they are especially intended to apply to sweat or cushion pads which are placed beneath or under the collar and isolate the collar from the horse's shoulders and neck.

(Here follows diagram marked p. 657.)

Figure 1 is a sectional view of a pad and a collar coincident with one side of the spring S. Fig. 2 is a perspective view of a portion of a pad with spring S attached.

Fig. 1 shows a section, P, of such a pad, with a fore roll, and to which is attached a curved metallic spring, S, which is so curved as to partly encircle and hug the fore roll of the horse-collar C, so as to hold that portion of the pad securely to the collar and yet not interfere with the hame. Said spring S differs materially from the spring in my previous patent. First, this spring has but one curved portion, intended for the fore roll only of the collar, instead of a curved portion for the fore roll and one for the back roll. The single-roll spring is applicable where the two-roll spring could not be used, and is preferable and cheaper even where the latter can be used.

By referring to Fig. 3 it will be easily seen that the fore roll, *f*, is approximately of uniform size in cross-section in the same collar, while the back roll, *b*, varies considerably in the size of its cross-sections 1 2 3 4 5 6, &c., increasing continually to near the bottom, where it gradually narrows again until it becomes quite small at the

(No Model.)

E. L. McCLAIN.

657

PAD FOR HORSE COLLARS.

No. 267,011. Patented Nov. 7, 1882.

Fig. 1.

No. 348.
McClain
v.
Ortmayer
et al.
p 657

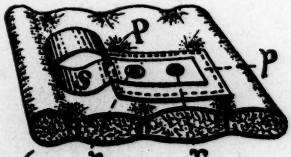

Fig. 2.

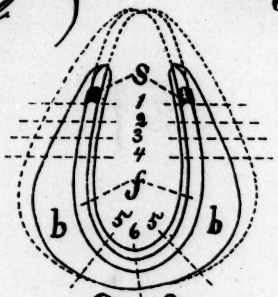

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6

Fig. 7.

Witnesses:
A. M. Mackey
Wm. Clouser

Inventor:
Edward L. McClain
per E. P. Robbins, att.

gullet. Hence it is seen that the spring S can be as easily placed around the fore roll at one position as at another—at the top, side, or bottom; but when a two-roll spring is used, while the curve for the fore roll will fit that roll at any position along the side of the collar, the curve for the back roll will fit that roll properly only when used in approximately the same position—at the same cross-section of that roll; and it should be here noticed that the use of a curved elastic spring as a means of adjustably attaching a pad to a horse-collar is not so much that said spring can be adjusted to fit different-sized collars as that such a spring enables the pad to be attached to or disengaged from a collar with ease and in the quickest manner possible.

Fig. 4 shows how a pad with a single-roll spring is attached or disengaged. The outer end of the spring is placed against the fore roll at or near the seam at the side of that roll, and then that portion of the pad is so moved that the spring rotates about said end until it comes in position around the fore roll, and that without deflecting much the curvature of said spring. The pad is disengaged from the collar by reversing the latter operation. Now, were it desired to similarly put a two-roll spring on a collar we would commence, as shown in Fig. 5, and rotate it into position, as shown in Fig. 6; but in order to put said spring on in that manner the roll-curves would have to be considerably deflected, as seen in Fig. 6, while the user would be as likely to attempt putting such a spring on the collar by bending both curves back, as shown in Fig. 7, until they would go on the collar without rotating any whatever. It is therefore seen that the two-roll springs are much more cumbersome to use than single-roll springs, while when the curves of the two-roll springs are repeatedly and much bent they lose their elasticity, and consequently their usefulness.

Fig. 3 shows a horse-collar having attached to it a pad provided with single-roll springs, and shows also by means of the dotted lines the outline of a larger or longer collar similarly placed, and how such a collar-pad could be fitted to a larger collar. The methods of attaching the single-roll springs are, however, as seen in
659 Figs. 1 and 2, similar to those used for the two-roll springs in my previous patent.

I show in Figs. 1 and 2 a stiffening-piece, *p*, of leather or other suitable material, placed between the spring S and the surface material of the pad P. The spring may be attached by passing rivets *r r* through the spring and stiffening-piece and then sewing the stiffening-piece to the surface material of the pad, as shown in Fig. 2, or by passing the rivets *r r* through the spring, stiffening-piece, and the surface material of the pad, as shown in Fig. 1. Also, as in my previous patent, the rivets *r r* may be passed entirely through the pad, if desired, and hence secure the spring to both surface-pieces of the pad and make the latter more firm at the place of attachment; but a stiffening-piece may not be used at all, or one may be used, as shown in Figs. 1 and 2, or on the inside or outside of either surface-piece or of both surface-pieces, as found desirable and practicable. The pad to which such springs are applicable may

be any sweat or cushion pad which separates the collar from all portions of a horse's neck and shoulders, and which is open at the withers or top, at the gullet or bottom, or both at top and bottom, or which is not open at all, and any such pads or portions of pads may have fore rolls, back rolls, both fore rolls and back rolls, or no rolls at all. These springs can also be used on pads which are placed beneath the collar at the withers, or wherever a collar pad is used, for isolating a portion only of a collar from the horse's neck or shoulders. They can also be used for attaching pads to other portions of harness—as to breast-collars, &c.

Some horse-collars are made to open at the top and others at the bottom, and in being used they are sometimes opened on being removed from a horse's neck, and are again fastened on being replaced. Sometimes they are not opened at all, but are removed or replaced by being slipped over the horse's head.

It is common to make pads of the same kind to open at the top and others to open at the bottom, or not to open at all, to suit the kind of collar with which they are to be used or the habits of the user. As previously mentioned, my single-curved springs are equally well adapted to any such pads. A great feature possessed by pads having the single-curved springs is that they can be easily and speedily removed from or attached to a collar, and therefore can be separated from the collar when it is removed from a horse's neck; or the pad need not be disengaged from a collar at all, since the pad will remain attached by means of the springs to the collar when the latter is slipped over a horse's head; or, since a pad open at top can be used with a collar open at top, or a pad open at bottom with a collar open at bottom, and, further, since any such pad can be easily and speedily removed from or attached to a collar, it can be used with any style of collar, and therefore has general use.

As an article of manufacture the single-roll spring can be made and attached to a pad at much less expense than a two-roll spring. First, it does not require so much material; second, it is easier to form and may not require tempering, as the tempered steel in the market may answer where it has been found that such steel will not do for a two-roll spring; third, it is more convenient to attach by riveting by hand or by machinery, for riveting machinery now in use can be used on a single-roll spring, but not on a two-roll one, since the curved ends of the latter project over the rivets.

It is to be understood that my springs are to be metallic or of any suitable elastic substance, and that the pads to which they are to be attached may be of any kind, material, or construction whatever to which it would be suitable and desirable to attach such springs, and that I am to use such arrangements as may be most suitable.

I claim—

1. As an attachment to a horse-collar pad or other harness-pad, and as a means of adjustably attaching a pad to a horse-collar or other part of harness, the elastic single-roll or single-curved spring S, constructed, arranged, attached, and operating substan-

tially in the manner shown or described, and for or with the purposes set forth.

2. The combination, with a horse-collar pad, of elastic single-roll or single-curve spring S, substantially in the manner shown or described, and for the purposes set forth.

EDWARD L. McCLAIN.

Witnesses:
HAROLD A. DICKEY.
A. M. MACKERLEY.

660 (2–175.)

[In pencil:] Banning. 15365.

DEPARTMENT OF THE INTERIOR.

[Vignette.]

UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file wrapper and contents in the matter of the letters patent granted John Scherling May 13th, 1884, number 298,626, for improvement in pad fastening for horse collars.

In testimony whereof I, M. V. Montgomery, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 28th day of July, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

Seal Patent Office, United States of America.

M. V. MONTGOMERY,
Commissioner.

661 $15.

To the Commissioner of Patents:

Your petitioner, John Scherling, residing at Dubuque, in the county of —— and State of Iowa, pray- that letters patent may be granted to him for the improvement in fastening pads to horse collars, set forth in the annexed specification, and he hereby appoints Joyce & Spear (Chas. H. Joyce & Ellis Spear), of Washington, D. C., his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

JOHN SCHERLING.

662 *Specification.*

To all whom it may concern:

Be it known that I, John Scherling, of Dubuque, in the county of

—— and State of Iowa, have invented a new and useful improvement in fastening pads to horse collars, and do hereby declare that the following is a full, clear, and exact description of the same.

663 My invention relates to horse collars, and it consists in the special construction of a combined wire safety pin and hook for fastening the pads to the collars, the same device being also useful for attaching pads to other parts of a harness.

In the accompanying drawings figure 1 shows a perspective view of the invention. Figs. 2 & 3 represent modifications. Fig. 4 is a perspective view of a part of the collar with the fastening applied thereto. Fig. 5 is a similar view of the collar and pad with one of the fastenings in place.

Heretofore these pads have been held to the collar by means of clips of sheet metal riveted or permanently attached to the pad and adapted to clasp a collar. The preferred form of the safety pin & hook is shown clearly in Fig. 1. It is made entirely of steel or other elastic wire, curved in the form of bows, *b b*, connected by a continuous part at *a*. One of the bows *b* is continued to form a pin, *e*, which catches into a hook, *f*, on the end of the other bow *b*.

To give proper elasticity to the pin a loop, *d*, is formed at its junction with the end of the bow. The pin serves to connect the devices to the pad, being attached thereto by passing the pin through the pad or the covering of the pad in the ordinary manner, as shown in Figs. 4 and 5.

These fastening devices may be modified as shown at e' and e^2 of Figs. 2 and 3.

All the forms are readily attachable and detachable & may be shifted from one place to another on the collar. It is attached to the collar in the manner aforesaid with the bows *b b* tightly

664 clamping over the collar rim B, as shown in Fig. 5. The safety-pin may be very cheaply made & is easily & conveniently applicable to the pad & collar & at the same time is adjustable thereon.

I claim as my invention—

First. The described safety pin & hook formed of wire, consisting of the bows *b b* & the part *a* connecting the bows

Apr. 12, '84. with suitable integral A devices for attachment to the collars formed upon the ends of the bows, substantially as described.

Second. In combination with the pad A & the collar B a safety pin & hook, consisting of the bows *b b a*, formed of wires, the pin *e*, & the hook *f*, substantially as described.

665 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN SCHERLING.

F. W. ALTMAN.
ALEX. SIMPLOT.

666 *Oath.*

COUNTY OF DUBUQUE, } ss:
State of Iowa, }

John Scherling, the above-named petitioner, being duly sworn, deposes and says that he verily believes himself to be the original, sole, and first inventor of the improvement in fastening pads to horse collars described and claimed in this application for letters patents as above; that he does not know and does not believe that the same was ever before known or used; that the invention described and claimed in said application has not to his knowledge been in public use or on sale in the United States for more than two years prior to the filing of this application for letters patent, and that the invention has not been patented by him nor with his knowledge or consent in any country; that he is a citizen of the United States and resident of Dubuque, Iowa.

JOHN SCHERLING.

Sworn to and subscribed before me this 5th day of March, A. D. 1886.

PETER KIENE, JR.,
[L. S.] *Notary Public.*

[Endorsed:] Patent Office U. S., Mar. 21, 1884.

667 Room No. 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Apr.* 10, 1884.

John Scherling, care Joyce & Spear, present.

Pad fastening. M'ch 21, '84. # 125,060.

Attention is called to a suggested change in claim 1 as indicated in pencil.

J. P. CHAPMAN, *Ex.*

[Endorsed:] 125,060. $\frac{7}{2}\frac{1}{6}\frac{9}{0}$. J. Scherling. 2. Ap'l 10, '84. (1.)

668 To the Com'r of Patents:

In the Matter of the Application of JOHN SCHERLING for patent for attachments for horse collars, filed March 21st, 1884.

Claim 1, [after]* before A "device," line 10, insert "integral."

Respectfully,
JOHN SCHERLING,
By JOYCE & SPEAR, *Att'ys.*

Apr. 12th, '84.

[Endorsed:] 125,060. $\frac{7}{2}\frac{1}{6}\frac{9}{0}$. J. Scherling. Amend't, Apr. 12, '84. (Apr. 12, 1884.) 2.

* Word enclosed in brackets erased in copy.

(2-024.)

Serial No. 123,060.

Issue division. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *Apr.* 18, 1884.

John Scherling, ass'or, c. o. Joyce & Spear, city.

SIR: Your application for a patent for an improvement in pad fastening for horse collars, filed Mar. 21, 1884, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run, but to do this properly applicants will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, photolithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor and title of invention as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the names of the assignees.

If you desire to have the patent issue to assignees an assignment containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully, BENJ. BUTTERWORTH,
Commissioner of Patents.

[Written across the face in red ink:] ☞ In remitting the final fee give the serial number at the head of this notice.

[Written on the margin in red ink:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same satisfactory reasons must be given therefor on or before the payment of the final fee.

669 $20.

Memorandum of Fee Paid at U. S. Patent Office.

Serial No. 125,060.

Inventor, John Scherling.

Patent to be issued to assignees.

Name of invention as allowed, pad fastening for horse collars.

Date of payment, Apr. 26th, '84.

Fee, twenty dollars.

Solicitor, Joyce & Spear.

Date of filing, Mar. 21st, '84.

Date of circular of allowance, Apr. 18th, '84.

Send patent to Alex. Simplot, Dubuque, Iowa.

[Endorsed:] Patent Office U. S., Apr. 24, 1884.

670 Serial No. 125,060. Ex'r Book $\frac{715}{26}$.

1884.

Patent No. 298,626. Slip.

John Scherling, ass'or of ½ to L. D. Randall & Co., same place,
Of Dubuque,
County of ——,
State of Iowa.
Invention, fastening pads to horse collars.

Parts of application filed.
- Petition, March 21, 1884.
- Affidavit, " " "
- Specification, " " "
- Drawings, " " "
- Model not required.
- Specimen, ——.
- First fee, cash, $15, March 21, 1884.
- " " cert, ——.

App. filed complete Mar. 21, '84.
2. Examined Apr. 15, '84. Chapman, ex.
Countersigned Apr. 14, '84: J. W. Babson, for Commissioner.
Notice of allowance, April 18, 1884.
3. Final fee, cash, $20, Ap'l 24, 1884.
" " cert., ——, 188–.
Patented May 13, 1884.
Att'y or P. O. address, Joyce and Spear, city.

671 1884.

Contents. G.

Application papers. Firm.
1. 2 Apr. 10, '84.
2. Amend't Apr. 12, '84.
3.
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9.
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12. 54 harness, horse collars.
13.
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Title: Improvement in pad fastenings for horse collars.
K. E.; E. L L.

[Endorsed:] 15365. D., '86.

673 UNITED STATES PATENT OFFICE.

JOHN SCHERLING, of Dubuque, Iowa, assignor of one-half to L. D. Randall & Co., of same place.

Pad-Fastening for Horse-Collars.

Specification forming part of Letters Patent No. 298,626, dated May 13, 1884; application filed March 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, John Scherling, of Dubuque, in the State of Iowa, have invented a new and useful improvement in fastening pads to horse-collars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to horse-collars; and it consists in the special construction of a combined wire safety pin and hook for fastening the pads to the collars, the same device being also useful for attaching pads to other parts of a harness.

(Here follows diagram marked p. 672.)

(No Model.)

672

J. SCHERLING.

PAD FASTENING FOR HORSE COLLARS.

No. 298,626. Patented May 13, 1884.

Fig. 1.

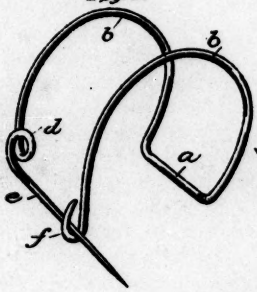


Fig. 2.

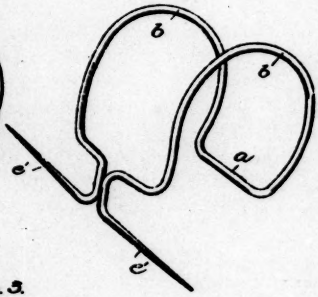
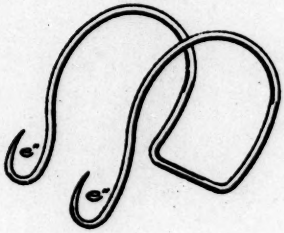


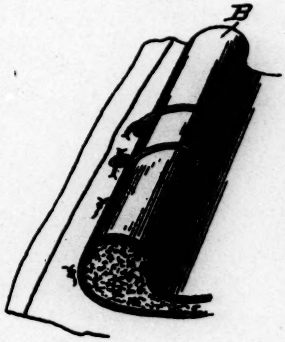
Fig. 3.



No. 348.
McClain
v.
Ortmayer
et al.
p. 672

Fig. 4.

Fig. 5.



Attest.
F. L. Middleton
J. E. Middleton

Inventor:
John Scherling
by Joyce & Spear
Attys.

In the accompanying drawings, figure 1 shows a perspective view of the invention. Figs. 2 and 3 represent modifications. Fig. 4 is a perspective view of a part of the collar with the fastening applied thereto. Fig. 5 is a similar view of the collar and pad with one of the fastenings in place.

Heretofore these pads have been held to the collar by means of clips of sheet metal riveted or permanently attached to the pad and adapted to clasp a collar.

The preferred form of the safety pin and hook is shown clearly in Fig. 1. It is made entirely of steel or other elastic wire, curved in the form of bows *b b*, connected by a continuous part at *a*. One of the bows *b* is continued to form a pin, *e*, which catches into a hook, *f*, on the end of the other bow *b*. To give proper elasticity to the pin, a loop, *d*, is formed at its junction with the end of the bow. The pin serves to connect the devices to the pad, being attached thereto by passing the pin through the pad or the covering of the pad in the ordinary manner, as shown in Figs. 4 and 5.

These fastening devices may be modified, as shown at e' and e^2 of Figs. 2 and 3. All the forms shown are readily attachable and detachable, and may be shifted from one place to another on the collar. It is attached to the collar in the manner aforesaid, with the bows *b b* tightly clamping over the collar-rim B, as shown in Fig. 5.

The safety-pin may be very cheaply made, and is easily and conveniently applicable to the pad and collar, and at the same time is adjustable thereon.

I claim as my invention—

1. The described safety pin and hook, formed of wire, consisting of the bows *b b* and the part *a*, connecting the bows with suitable integral devices for attachment to the collars formed upon the ends of the bows, substantially as described.

2. In combination with the pad A and the collar B, a safety pin and hook, consisting of the bows *b b a*, formed of wires, the pins *e*, and the hook *f*, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN SCHERLING.

Witnesses:
F. W. ALTMAN.
ALEX. SIMPLOT.

674 (2–175.)

[In pencil:] Banning. 15365.

DEPARTMENT OF THE INTERIOR.

[Vignette.]

UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of

this office of the file wrapper and contents in the matter of the letters patent granted Edward L. McClain March 10th, 1885, number 313,606, for improvement in horse-collar pad.

In testimony whereof I, M. V. Montgomery, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 28th day of July, in the year of our Lord one thousand eight hundred and eighty-six, and of the Independence of the United States the one hundred and eleventh.

Seal Patent Office, United States of America.

M. V. MONTGOMERY,
Commissioner.

675 $15, P. O. CINCINNATI, O., —— —, 1884.

To the Commissioner of Patents, Washington, D. C.

DEAR SIR: Enclosed please find P. order for $15.00, the first fee on application of Edward L. McClain, of Greenfield, Ohio, for "horse-collar pads."

E. P. ROBBINS, *Attorney.*

[Endorsed:] U. S. Patent Office, Jul- 2, 1884.

676 1 dr.

Petition, with Power of Attorney.

To the Commissioner of Patents:

Your petitioner, Edward L. McClain, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, prays that letters patent may be granted to him for the improvement in horse-collar pads set forth in the annexed specification; and he hereby appoints Edward P. Robbins, M. E., of Cincinnati, State of Ohio, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

EDWARD L. McCLAIN.

Signed at Greenfield this 30th day of June, in the presence of—
W. H. EVANS.

677 *Specification.*

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States and residing at Greenfield, in the county of Highland and State of Ohio, have invented a new and useful improvement in horse-collar pads, of which the following is a specification:

My invention relates to an improvement in elastic clasps or hooks for horse-collar pads,

Erased Dec. 17, '84. and to the method of attaching the same to the pads, and to the combination of such hooks with collar pads as means of adjustably attaching a pad to a horse collar.

The object of my invention is to provide means whereby hooks or clasps which clasp the fore roll of the collar may not be pulled out of place or from the collar roll when backing a horse or when the collar and pad are pushed forward upon the horse's neck and the collar is suddenly pulled back in place again and is pulled
678 off of the pad, as in going down hill, and whereby the clasp may be better adapted to adjust itself to the collar while permitting the pad to adjust itself to the collar.

Erased Nov. 28, '84. The nature of this invention and the state of the art may be better understood by reference to other patents issued to me for horse-collar pads, viz:

U. S. patent No. 259,700 (June 12, '82).
" " " 267,011 (Nov. 17, '83).
Canada " " 17269 (dated July 13th, '83).

Fig. 1 is a sectional view of a collar, *a b*, and pad *c d e* coincident with one side of the clasp, which is shown in place and clasping the fore roll of the collar. Fig. 2 is a plan view of the clasp and its attaching piece 3.

[On the margin:] No Fig. 3.

Fig. 4 shows one modification of a swivel hinge.

Figs. 5, 6, 7, and 8 show other modifications of swivel hinges.

The same letters or numbers designate the same parts in all of the figures.

In Fig. 1, *a* is the fore roll of the collar and *b* the back roll or body. *c* is the fore roll and *d* the back roll of the pad and *e*
679 its body. *l* is an elastic metallic clasp or hook which is hinged at 2 to a suitable piece secured to the body of the pad and which is curved in the form of a circle smaller than the circular section of the fore roll of the collar which it clasps; and hence, since the clasp is tempered and elastic, it clasps the fore roll and secures the pad thereto. The outer end of the clasp is bent outwards, as shown at 7 in Fig. 1, so that it will not abrade the collar when it is being clasped to the latter or taken therefrom.

A simple hinge, 2, may be serviceable to permit of movement of the collar upon the pad without the clasp becoming disengaged from the fore roll of the collar, but it is believed that if provision be made for the clasp 1 to swivel at the hinge that the clasp will be better able to adjust itself to the fore roll of the collar and to permit of movement of the collar upon the pad and of adjustment of the

Words and sentences enclosed between rules erased in copy.

pad to the collar. Hence Fig. 4 shows one method of swiveling the clasp at the place where it is hinged to the pad. Here
680 the hinge eye 2 of the clasp is flared outwards at its ends, as shown at 5, so that it can swivel upon a cylindrical pin or rivet, 4.

In Fig. 5 the pin or rivet 4 is thickest in the middle 8 and tapers towards the ends, while the eye 2 of the clasp is cylindrical.

The eye 2 may be flared and the rivet 4 tapered as above in making a swivel hinge.

In Figs. 1, 2, 4, and 5 a malleable-iron hinge piece, 3, is shown adapted to receive the eye 2 of the clasp and the pin or rivet for hinging the clasp to the piece 3 and adapted to be riveted to the pad body substantially as my elastic clasps or springs now in use are riveted to the pad.

The clasp eye 2 might be cut out in the middle to receive the eye of the hinge piece 3, but the construction shown is the best.

The clasp 1 may be hinged to the pad in various ways which will provide for a swivel motion. Thus the metallic hinge piece 3 may be dispensed with and the hinge pin 4 may be bent like a staple and riveted to the pad, as shown in Fig. 7, or the clasp may
681 be attached to the pad by means of thread or a cord or strap, which may pass through the eye 2, Fig. 7, and the body of the pad and have the ends sewed to the pad or tied together.

A flat strap could be rounded at the middle, where the eye 2 works upon it, and each of its ends could have a rivet passed through it and thus be riveted to the body of the pad.

The end of the clasp could have a slot cut near and parallel to the end, as shown at 9 in Fig. 6, so as to leave a narrow cross-connection, 11, around which a metallic or leather strap, 3, could be looped, as at 14, and which could be sewed to the body of the pad or riveted thereto by means of rivets 6. Such a clasp could be attached by stitching around the end 11 and to or through the pad.

The hole in the end of the clasp may be like that shown in Fig. 8, and thread, a strap, wire, or a staple, 15, may be used to attach the clasp to the pad.

The clasp itself need not be of sheet or strap metal, as
682 shown, but may be made of elastic wire bent into any form which has embodied therein a curved portion adapted to clasp and hug the fore roll of the collar and adjustably secure the pad thereto in substantially the same manner as does the flat metal spring herein shown and described,

Erased Nov. 28, '84.

or as set forth in my previous patents above referred to.

Wire clasps may have various-shaped outlines and various loops, eyes, or hooks for attaching the clasp to

Erased Dec. 17, '84.

the pad. Such arrangements are mere mechanical variations within the skill of the artizan.

Words and sentences enclosed between rules erased in copy.

2 The essence of this invention, then, is providing means for swiveling the clasp at the place of attachment for the purposes set forth.

[Claims.]*

Insert 3, Feb. 3, '85: I claim— (3)

Substitute 1, Nov. 28, '84.
Nothing.
Aug. 30, '84.
Nothing.
683
Only had the device.
Aug. 30, '84.
Nothing.
Aug. 30, '84.
Nothing.

1. A clasp or hook for attaching a pad to a horse collar, which is adapted to clasp the roll of the collar and [to be]* hinged at the place of attachment.

2. A clasp or hook for attaching a pad to a horse collar, which is adapted to clasp the roll of the collar, and which is arranged to swivel at the place of attachment.

3. The elastic clasp 1, having a circular portion adapted to clasp the roll of the collar and having an eye [2]* for hinging the clasp to the pad.

4. The combination, with a horse-collar pad, of a clasp or hook for attaching the pad to the collar, [and]* which is adapted to clasp the roll of the collar, and a [to work]* which works on a hinge at the place of attachment.

5. The combination, with a horse-collar pad, of a clasp or hook for attaching the pad to the collar, [and]* which is adapted to clasp the roll of the collar and a [to swivel]* which swivels at the place of attachment.

6. The combination, with a horse-collar pad, of the clasp or hook 1 for attaching the pad to the collar and which has a circular portion adapted to clasp the roll of the collar and has an eye, 2, for hinging the clasp to the pad.

Inventor, EDWARD L. McCLAIN.

Witnesses:
W. H. EVANS.
W. H. IRWIN.

684 *Oath.*

STATE OF OHIO, *Hamilton County,* } ss:

Edward L. McClain, the above-named petitioner, a citizen of the United States and resident of Greenfield, in the county of Highland and State of Ohio, being duly sworn, deposes and says that he verily

*Words and figures enclosed in brackets erased in copy.
Words and sentences enclosed between rules erased in copy.

believes himself to be the original, first, and sole inventor of the improvement in horse-collar pads described and claimed in the foregoing specification; that the same has not been patented in any country to himself or to others with his knowledge or consent; that the same has not to his knowledge been in public use or on sale in the United States for more than two (2) years prior to this application, and he does not know and does not believe that the same was ever known or used prior to his invention thereof.

EDWARD L. McCLAIN.

Sworn to and subscribed before me this 30th day of June, 1884.

WILLIAM H. IRWIN,

[L. S.] *Notary Public, Highland County, Ohio.*

[Endorsed:] Serial No. 136,601. No. ½. Filed July 2, 1884. U. S. Patent Office, Jul- 2, 1884.

685 Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *July* 16, 1884.

Edward L. McClain, c. o. E. P. Robbins, cor. Walnut & 5th Sts., Cinn., Ohio.

Horse-collar pads. July 2, 1884. # 136,601.

The manner in which applicant's patents are referred to on page 3 of specification is objected to. The law does not require an applicant to furnish a schedule of patents granted to him, and besides there are other patents for the same purpose. There is no objection to stating that the present application is an improvement on patents previously granted.

There is no Fig. 3 on the drawing. The 1st, 2d, 4th, & 5th claims are vague and indefinite and specify no mechanism at all, and are not, therefore, within the terms of the law, which provides that an applicant "shall particularly point out and distinctly claim the part" which is his invention. The 3d clause is for merely one-half of the device, which is inoperative of itself. The same is true of 6th clause.

686 The device consists of two parts hinged together in a peculiar way, and a claim that shall properly describe it may perhaps be patentable, but the present claims are refused. Attention is called to patent of Scherling, May 13, 1884, No. 298,826, which, although different in structure from applicant's, has the same functions—horse collar.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CHAPMAN, *Ex.*

[Endorsed:] Serial No. 136,601. Paper No. 1. Rejection. Dated July 16, 1884.

687 "Horse-collar pads." E. L. McClain, applicant. No. 136,601. Filed July 2, '84. E. P. Robbins, attorney.

CINCINNATI, O., *Aug.* 18, 1884.

To the Commissioner of Patents.

DEAR SIR: Room 95 letter of July 7, '84, was duly received and carefully considered.

As to the schedule of patents furnished in the application, I am aware that the office does not require it. But it is a privilege, if not a duty, for an inventor to give any references in his patent that may give other and subsequent inventors a comprehensive knowledge of the state of the art at the time the application was made. Much has been said about the methods of attaching spring clasps to collar pads in my previous patents, which would prove useful to one examining or using my present improvements, but the particular reason for furnishing the said schedule was because it embraced a foreign patent which an inventor might otherwise not learn of and a knowledge of which might prove useful, as will be
688 seen to be the case in this instance—for reference is made in the above office letter to patent of Sherling, May 13, 1884, which would never have been applied for had the inventor been aware of the above-mentioned Canadian patent, or could not have been allowed had the U. S. office been aware of its existence.

The "number" 3 was omitted in numbering the figures on the drawing. Fig. 4 should have been Fig. 3, &c. Proper reference was made in the specification to the figures given in the drawing.

As to the 1st, 2nd, 4th, and 5th claims being "vague and indefinite and specifying no mechanism at all," &c., I have to state that, omitting for the present the existence of the said Scherling patent, the object of *of* the said clause in the law referred to is to require such particularity in the patent, as a whole, as will allow of no indefiniteness as to what the inventor claims as his invention. When the invention set forth in the specification and drawings is so simple as to be definitely comprehended by simply naming it, then such naming the invention in a claim, especially a generic claim, fulfills the letter of the law.

689 Now, having read the specification and examined the drawings, any one could get nothing but the exact idea of the invention claimed the moment the word "clasp or hook" was read in the claim, *a fortiori* when its functions were included therein.

Nothing more can be required in a generic claim to so simple a device, and the 1st, 2d, 4th, and 5th claims are generic claims therefor.

As to claim 3, the device proper is that specifically set forth in the said claim, and different methods of hinging the device to the pad had been set forth, and the scope of the invention does not require that the clasp be hinged in a particular manner, but leaves the user an option as to how he may hinge the clasp to the pad. The clause "Having an eye 2 for hinging the clasp to the pad" indicates that some one of the devices or means set forth are to be used with the "*the* eye 2" in fastening the clasp to the pad. The

objection cannot therefore hold. The above explanation applies equally to claim 6.

Now, as to the patent of Scherling, May 13, 1884, No. 298,826, and its relation to my previous patents and its competency as a
690 reference in anticipating my present improvements, said patent No. 298,826 was filed Mar. 21st, 1884.

A patent was granted to me in Canada, July 13th, 1883, which covered clasps made of wire and attached in any suitable manner, and the language of which covers everything set forth in Scherling's said patent. The said original Canadian patent is enclosed herewith for examination, after which it is to be returned to its owner.

Quotations and references may be made by the office for future use.

As soon as Scherling's patent, 298,826, was issued E. L. McClain had Mr. James Moore, of Cincinnati, Ohio, an experienced patent lawyer, examine his U. S. patents, No. 259,700, June 20, '82, and No. 267,011, Nov. 7, '82, and the above said Canadian patent, and give an opinion as to infringement before taking steps in court relative thereto.

The said opinion is enclosed herewith, and it is also to be returned.

It fully sets forth the similarity in construction and functions existing between the said patents.

From an examination of the said Canadian patent and of Mr. Moore's said opinion, and according to the law as given in
691 Rules of Practice, Mar. 1st, 1884, p. 4, sec. 24, and p. 5, sec. 27, which states that "a patent may be obtained * * * if the invention has not been patented," it is evident that the office erred in granting the said Scherling patent.

The so-called "safety-pin" in Scherling's patent is clearly covered by the language in McClain's said Canadian patent, and is nothing more than a means of "clinching" the device to a pad, and the language of the Canadian patent on p. 9 sufficiently describes such method.

Further, Fig. 3, Scherling patent, has nothing which could be termed a "safety-pin." What he terms a "hook," and consisting of the bows *b b* and the connecting part *a*, is simply the outline of McClain's sheet-metal spring, and is the same as the same parts of the spring shown in Fig. 5 of McClain's Canadian patent. "Suitable integral devices for attachment to the collars (should be pads) formed upon the ends of the bows" (Scherling's 1st claim) is certainly covered by the language in McClain's Canadian patent.

It may be true that there is a slight capability of Scherling's wire device to swivel, but no more than McClain's in his Canadian patent.

692 There is no evidence showing that Scherling endeavored to provide a clasp that would swivel, nor that he was aware of any advantages derivable therefrom. He furnishes no such information to the public, and consequently deserves no credit therefor.

In view of the evidence above furnished, it is clear that McClain

is entitled to claim the principles of his invention as set forth in his generic claims, as well as a specific construction.

E. P. ROBBINS, *Attorney.*

[Endorsed:] Serial No. 136,601. Paper No. 2. Letter to office. Filed Aug. 21, 1884. U. S. Patent Office, Aug. 21, 1884.

693 (Enclo.)

Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Aug.* 23, 1884.

Edward L. McClain, c. o. Edward P. Robbins, cor. Walnut & 5 Sts., Cinn., Ohio.

Horse-collar pads. July 2, 1884. #136,601.

With the Canadian patent and opinion rec'd with letter of attorney, filed Aug. 21st inst., the office has nothing to do, so far as relates to the present case, and they are returned herewith. The former criticism of the specification and claims was correct, and is repeated. The Canadian patent should be referred to in the oath in this case, in accordance with the rules. In addition to former objection to the claims, attention is called to the fact that the 1st and 4th claims are alike, the second and fifth and the 3d and 6th are the same. The first and 4th and the second and fifth are also for different and independent devices, one of which is hinged and the other swivelled, saving the question of duplicity.

Further, stating the functions of certain mechanism is no description of it. The structure should be defined. The validity or
694 invalidity of the patent cited is a matter for the court to determine, but nevertheless its existence is a bar to the grant of this case as now presented.

As before stated, the definite structure may perhaps be novel.

JOHN D. HYER, *Act'g Ex'r.*

[Endorsed:] Serial No. 136,601. Paper No. 3. Rejection. Dated Aug. 23, 1884.

695 "Horse-collar pads." E. L. McClain. Serial No. 136,601. Filed July 2, 1884. E. P. Robbins, attorney.

CINCINNATI, O., *Aug.* 27, 1884.

To the Commissioner of Patents.

DEAR SIR: Room 95 letter, 8, 23, '84, duly received; also said Canadian patent and opinion.

The letter states that "the Canadian patent should be referred to in the oath in this case." The present application is not for the same invention set forth and claimed in said Canadian patent. The

Canadian patent, however, covered the same matter as the U. S. patents of June 20, 1882, and of Nov. 7 '82.

Rule 39 reads: "In every original application the applicant must distinctly state, under oath, whether the invention has been patented * * * in any country," &c.

The Canadian patent will not be referred to in the oath until definite reference is cited to rules covering the case. Please give such references.

The 1st claim is for an article of manufacture, the 4th is for the combination of that article with a collar pad.

696 Same relation between the 2nd and 5th or the 3d and 6th as between the 1st and 4th. Please explain if this is not the case.

As to the 1st and 4th and the 2nd and 5th claims being "for different and independent devices," were the statement true a patent could not cover more than one form of a device; but a patent may cover all forms coming under the generic claims, provided the invention set forth is as broad as the claims. See Walker patents (1883), p. 129 (sec. 180).

A hinge is a device that is jointed and where one part can move about an axis (a fixed pin or bearing) of the other. A swivel is a hinge which has provisions for motion about more than a single axis, or which can turn about a central point in different or varying directions. See also Webster's general definition under "mech."

The 1st and 4th claims cover the simple movement and the 2nd and 5th cover a movement more complex, but all pertain to "hinging" the clasp to the pad.

697 The description in the 1st and 4th claims will be improved by omitting the words "to be," in last line but one, 1st claim, and substituting for "to work," in last line but one of claim 4, the words "which works."

Instead of the words "to swivel," in last two (2) lines of claim 5, write "which swivel."

The applicant will not consent to limit his claim to "a definite structure," since his patent sets forth various ways of carrying out his invention.

In this connection see Rice's Digest Com. Dec. (1869–'80), p. 72 (sec. 38), p. 79 (79), p. 80 (85), p. 82 (95), p. 86 (123).

E. P. ROBBINS, *Attorney.*

[Endorsed:] Serial No. 136,601. Paper No. 4. Amend't & argument. Filed Aug. 30, 1884. Cancelled Nov. 28, '84. U. S. Patent Office, Aug. 30, 1884. Division XI.

698 Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept.* 2, 1884.

Edward L. McClain, c. o. E. P. Robbins, cor. Walnut & 5th St., Cinn., Ohio.

Horse-collar pads. July 2, 1884. #136,601.

If the Canadian patent of applicant is different from the present one, of course it is not necessary that it be embraced in the oath here, and the reason is all the stronger why reference to it should be eliminated from the specification. The logic of attorneys' statements was that it was broadly the same.

The objections to the specifications and claims already pointed out specifically are renewed and the claims are refused on reference and for reasons already given.

JOHN D. HYER, *Act'g Ex'r.*

[Endorsed:] Serial No. 136,601. Paper No. 5. Rejection. Dated Sept. 2, 1884.

699 "Horse-collar pad." E. L. McClain, applicant. Serial No. 136,601. Filed July 2nd, 1884. E. P. Robbins, att.

WASHINGTON, D. C., *Nov.* 25, 1884.

To the Commissioner of Patents.

SIR: In view of room 95 letter of Sept. 2, '84, and of an interview with the examiner recently, I now authorize the following amendments: Erase lines 6 to and including 13, p. 3; also lines 9 and 10 and "or," in line 8, p. 7.

Substitute the following two (2) claims for the claims of the application:

Claim 1. A hinge joint in combination with a clasp or hook
a hinged joint and
having A a curved portion adapted to clasp
Cancelled Feb. 3, '85, 1. the roll of a horse collar, whereby a collar pad may be adjustably attached to the collar roll and whereby the hinge joint may provide a means for the rotation of the said clasp or hook about the collar roll, so that the pad may slip forwards or backwards under the collar without causing the hook
700 2a to disengage from the collar roll.

Words and sentences enclosed between rules erased in copy.

2.

Substitute 2, Dec. 17, '84.

Claim 2. The combination of a clasp or hook having a curved portion adapted to clasp the roll of a horse collar, whereby a collar pad may be adjustably attached to the collar roll, a hinge joint at the place of attachment to the collar, and the collar pad.

Fig. 1 of the drawing was amended by permission of the examiner so as to correct an error of the draftsman in making the free end 7 of the clasp *l* to- long, it having been made to extend clear down into the bottom of the depression at the juncture of the fore roll with the back roll.

E. P. ROBBINS.

[Endorsed:] Serial No. 136,601. Paper No. 6. Amendment 1. Filed Nov. 28, 1884. Cancelled. (U. S. Patent Office, Nov. 28, 1884. Division XI.)

701 Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Dec.* 1, 1884.

Edward L. McClain, c. o. E. P. Robbins, cor. Walnut & 5th Sts., Cincinnati, Ohio.

Horse-collar pads. July 2, 1884. No. 136,601.

The amended claims in this case are not legitimate. Of itself there is nothing palpable or tangible in a joint, and the claims are not such as suggested to attorney in our oral interview. The second clause is ambiguous, and both are answered in terms by patent before cited. The paragraph, lines 11 to 17, page 7, also fairly describes Scherling's device, and is inadmissible. The words on page 2, "method of attaching the same to the pads," &c., should be eliminated. It is a mechanical structure and not a method that is the subject of the application. The amended claims are rejected.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CHAPMAN, *Ex.*

[Endorsed:] Serial No. 136,601. Paper No. 7. Rejection. Dated Dec. 1, 1884.

Words and sentences enclosed between rules erased in copy.

702 "Horse-collar pads." Ser. No. 136,601. Filed July 2, 1884.
E. L. McClain—E. P. Robbins, att'y.

CINCINNATI, O., *Dec. 13th*, 1884.

To the Commissioner of Patents.

DEAR SIR: Room 95 letter of Dec. 1, '84, was duly received. In answer to said letter I now authorize the following changes:

Erase "lines 11 to 17, p. 7."

On p. 2, after "pad," in line 16, erase all pertaining to "method," including line 21.

The substance of office letter of July 16, '84, was that the "claims are vague and indefinite and specify no mechanism at all," &c.

Office letter of 8, 23, '84, "repeated" same.

" " " 9, 2, '84, "renewed" same "objections." In the said oral interview with the attorney the examiner held the same as in the said letters. The attorney does not remember that the examiner "suggested" any particular form of claims, nor that the attorney stated how he would word his claims, but he does know that a "joint" is that which is new in this application, and that it
703 serves special purposes and is incorporated within "a definite structure" and is an element in the combination constituting said structure, and that he substituted the said two (2) new claims Nov. 25, '84, believing that they would satisfy the office on the score of a "definite structure."

Claim 1 is for "a combination whereby a collar pad may be attached to the collar roll" and whereby "the hinge may provide a means" for enabling the said clasp to work as desired. The language used does not indicate that "a joint" is by "itself" claimed. The said joint is an element of the above combination and is claimed in combination only, and hence is proper. I insist that the objection to claim 1 is not competent.

Claim 2 was ambiguous because "pad" was omitted in the last line but one of claim after the word "collar."

Substitute therefor the following new claim:

704 (2.) "A clasp or hook, a horse-collar pad, and a hinge joint where the clasp is attached to the collar pad, all in combination, the clasp having a curved portion adapted to clasp the roll of a horse collar, and thereby adapted to adjustably attach the collar pad to the roll of the horse collar."

2. Erased Feb. 3, '85.

The attorney has not endeavored to write claims which would not cover Scherling's device. He does not now think of avoiding the Scherling patent. His present object is to write claims which will properly cover the invention set forth in this application as though Scherling's patent had never been applied for. A sworn statement is furnished herewith, in accordance with "Rules of Practice" 74

Words and sentences enclosed between rules erased in copy.

and 75 of Aug. 8, 1884, which it is believed will meet the objection that the said Scherling patent bars the grant of this application.

E. P. ROBBINS, *Att'y.*

[Endorsed:] Serial No. 136,601. Paper No. 8. Amendment 2. Filed Dec. 17, 1884. Cancelled.

705 Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Dec.* 19, 1884.

Edward L. McClain, c. o. Edw'd P. Robbins, cor. 5th & Walnut Sts., Cinn., Ohio.

Horse-collar pads. July 2, 1884. # 136,601.

The claims as now drawn are again refused for reasons formerly given. There is nothing palpable or tangible in a "joint," and it is not a proper element of a mechanical combination. A claim may be made for a hook or clasp composed of one section adapted to be attached to the pad and another provided with the curved spring hook portion, the two hinged or jointed substantially as set forth, and perhaps a second claim for the same in combination with the pad and collar. Such claim or claims properly drawn will be further considered.

The affidavit furnished has no pertinency to the case and cannot be made a part of the record. Affidavits can be received only when the office denies the operativeness of a device and when an applicant desires to overcome *prima facie* the date of some reference cited for the purpose of interference.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CHAPMAN, *Ex.*

[Endorsed:] Serial No. 136,601. Paper No. 9. Rejection. Dated Dec. 19, 1884.

706 Room 95.

"Horse-collar pads." Ser. No. 136,601. E. L. McClain. Filed July 2, 1884. E. P. Robbins, attorney.

CINCINNATI, O., *Jan.* 22, 1885.

The Commissioner of Patents.

DEAR SIR: Room 95 letter of Dec. 19, 1884, duly received.

The attorney requests a reconsideration of the claims as they now stand before proceeding further.

The attorney requests a reconsideration of the affidavit filed in connection with the attorney's letter of Dec. 13, '84, as to its "pertinency" and as to its being made "a part of the record," and in this connection will state with regard thereto that rule 74 of Rules of

Practice of Aug. 12, '84, is now operative, the last clause only being obsolete, as per notes on p. II (2) of above rules, and as rule 74 stands it has no connection whatever with matter in "interference."

Rule 75, referring to "operativeness of a device," has no reference whatever to matter in "interference."

According to rules 74 and 75, the said affidavit is operative to remove the bar to the granting of McClain's application No. 136,601.

E. P. ROBBINS, *Att'y.*

[Endorsed:] Paper No. 10. Serial No. 136,601. Letter to office. Filed Jan. 24, 1885. (United States Patent Office, Jan. 24, 1885.)

707 Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Jan'y* 26, 1885.

Edward L. McClain, c. o. E. P. Robbins, cor. Walnut & 5th Sts., Cinn., Ohio.

Horse-collar pads. July 2, 1884. # 136,601.

The action of Dec. 19, 1884, in above-named case is repeated, both relative to the claims and the reception of the affidavits as a part of the record. The claims may now be regarded as in condition for appeal. If applicant should desire an interference with the patent cited an affidavit to overcome *prima facie* the date of filing of Scherling's application may be secured under rule 74. As the operativeness of the device has not been denied no affidavit under rule 75 is pertinent in the case.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CHAPMAN.

[Endorsed:] Serial No. 136,601. Paper No. 11. 2d rejection. Dated Jan'y 26, 1885.

708 "Horse-collar pads." Ser. No. 136,601. Edward L. McClain. Filed July 2nd, 1884. E. P. Robbins, att'y.

CINCINNATI, O., *Jan.* 31, 1885.

To the Commissioner of Patents.

DEAR SIR: Room 95 letter of Jan. 26th, 1885, was duly received.

New claims.—1. A hook or clasp composed of one section adapted to be attached to the pad and another section provided with the curved-spring hook adapted to clasp the fore roll of a horse collar and thus secure the pad to the collar,
3 the two sections being hinged substantially as set forth.

2. In combination with a horse-collar pad, a hook or clasp composed of one section adapted to be attached to the pad and another section provided with the curved-spring

hook adapted to clasp the fore roll of a horse collar and thus secure the pad to the collar, the two sections being hinged substantially as set forth.

709 It is respectfully submitted that the above claims, which were substantially suggested in the office letter of Dec. 19th, 1884, accurately set forth the invention set out in the specification; and, further, that there is no conflict between them and the "integral" hook of Scherling's patent attached to the pad by the extended pins; consequently an affidavit is now unnecessary. I therefore now authorize the substitution of the present claims for those substituted Nov. 25th, 1884, and Dec. 13th, 1884, and request that the said affidavit be returned, and that further action in the case be taken.

Very respectfully, E. P. ROBBINS, *Attorney.*

[Endorsed:] Paper No. 12. Serial No. 136,601. Amendment 3. Filed Feb. 3, 1885. U. S. Patent Office, Feb. 3, 1885. Division XI. United States Patent Office, Feb. 2, 1885.

710 Room 95.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Feb.* 4, 1885.

Edward L. McClain, c. o. E. P. Robbins, cor. Walnut & 5th Sts., Cinn., Ohio.

Collar pads. July 2, 1884. No. 136,601.

The affidavit filed Dec. 17, 1884, which was not made a part of the record in the case, *and* is herewith returned in compliance with request of attorney.

JOHN D. HYER, *Ass't Ex'r.*

J. P. CHAPMAN, *Ex.*

[Endorsed:] Serial No. 136,601. Paper No. 13. Letter. Dated Feb. 4th, 1885.

711 (2–024.)

Serial No. 136,601.

Issue division. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *Feb. 7th,* 1885.

Edward L. McClain, c. o. E. P. Robbins, Cinn., Ohio.

SIR: Your application for a patent for an improvement in horse-collar pads, filed July 2d, 1884, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run, but to do this properly applicants will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, photolithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor and title of invention as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the names of the assignees.

If you desire to have the patent issue to assignees an assignment containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully, BENJ. BUTTERWORTH,
Commissioner of Patents.

[Written across the face in red ink:] ☞ In remitting the final fee give the serial number at the head of this notice.

[Written on the margin in red ink:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same satisfactory reasons must be given therefor on or before the payment of the final fee.

$20, P. O. CINCINNATI, O., *Feb.* 14, 1885.

The Commissioner of Patents.

DEAR SIR: Enclosed find a postal order from Edward L. McClain of Greenfield, Ohio, for twenty dollars ($20.00), the final fee for his serial No. 136,601, "horse-collar pads," filed July 2, '84, and allowed Feb. 7th, '85.

From—

EDWARD L. McCLAIN.

E. P. ROBBINS, *Att'y.*

[Endorsed:] U. S. Patent Office, Feb. 18, 1885. By mail.

712 Serial No. 136,601. Ex'r Book No. $\frac{1601}{57}$.

1884. Chapman.

Patent No. 313,606.

Edward L. McClain,
Of Greenfield,
County of Highland,
State of Ohio.
Invention, horse-collar pads.

Parts of application filed.
- Petition, July 2, 1884.
- Affidavit, " " "
- Specification, " " "
- Drawing, " " "
- Model not required.
- Specimen, ——.
- First fee, cash, $15, July 2, 1884.
- " " cert, ——.

App. filed complete July 2, '84.
2. Examined Feb'y 4, '85. Chapman, ex.
Countersigned Feb. 6, '85. J. W. Babson, for Commissioner.
Notice of allowance, Feb. 7th, 1885.
3. Final fee, cash, $20, Feb. 18, 1885.
" " cert., ——, 188–.
Patented Mar. 10, 1885.
Att'y or P. O. address, Edward P. Robbins, cor. Walnut & 5th Sts., Cincinnati, Ohio.

713 1884.

Contents. G.

½. Application papers.
1. Rejection, July 16, 1884.
2. Letter to office, Aug. 21, '84.
3. Rejection, Aug. 23, 1884.
4. Amend't & arg'm't, Aug. 30, '84.
5. Rejection, Sept. 2, 1884.
6. Amend't 1, Nov. 28, '84.
7. Rejection, Dec. 1, 1884.
8. Amend't 2, & affidavit not entered, Dec. 17, '84.
9. Rejection, Dec. 19, 1884.
10. Letter to office, Jan. 24, '85.
11. 2d rejection, Jan'y 26, 1885.
12. Amend't 3, Feb. 3, '85.
13. Letter, Feb. 4, '85.
14.
15.
16.
17.
18.
19.
20.

(No Model.)

E. L. McCLAIN.

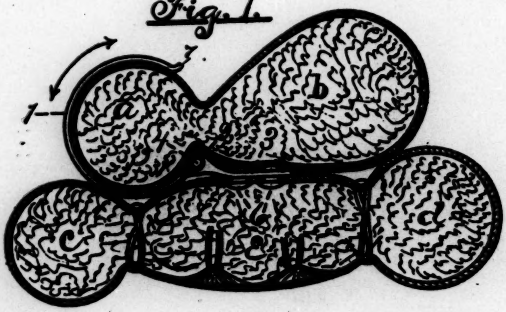
714

HORSE COLLAR PAD.

No. 313,606.

Patented Mar. 10, 1885.

Fig. 1.



No. 348.
McClain
vs
Ostmayer
et al
p. 714

Fig. 2.

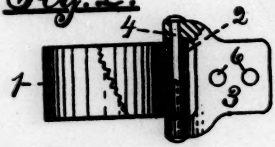


Fig. 4.

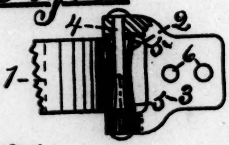


Fig. 5.

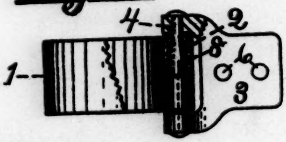


Fig. 6.

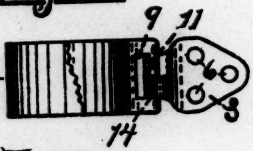


Fig. 7.

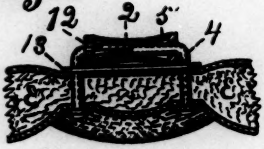


Fig 8.

Witnesses:
Julius Walker.
P. A. Pridmay

Inventor:
Edward L. McClain,
per E. P. Robbins, M.E.
attorney.

Title: Improvement in horse-collar pads.
54. Harness, horse collars.
K. E.; E. L. L.

[Endorsed:] 15365. D., '86.

715 UNITED STATES PATENT OFFICE.

EDWARD L. MCCLAIN, of Greenfield, Ohio.

Horse-Collar Pad.

Specification forming part of Letters Patent No. 313,606, dated March 10, 1885; application filed July 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, Edward L. McClain, a citizen of the United States, and residing at Greenfield, in the county of Highland and State of Ohio, have invented a new and useful improvement in horse collar pads, of which the following is a specification.

My invention relates to an improvement in elastic clasps or hooks for horse-collar pads.

The object of my invention is to provide means whereby hooks or clasps which clasp the fore roll of the collar may not be pulled out of place or from the collar-roll when backing a horse, or when the collar and pad are pushed forward upon the horse's neck and the collar is suddenly pulled back in place again and is pulled off of the pad, as in going down-hill, and whereby the clasp may be better adapted to adjust itself to the collar, while permitting the pad to adjust itself to the collar.

(Here follows diagram marked p. 714.)

Figure 1 is a sectional view of a collar, *a b*, and pad *c d e*, coincident with one side of the clasp, which is shown in place and clasping the fore roll of the collar. Fig. 2 is a plan view of the clasp and its attaching-piece 3. Fig. 4 shows one modification of a swivel-hinge. Figs. 5, 6, 7, and 8 show other modifications of swivel-hinges.

The same letters or numbers designate the same parts in all of the figures.

In Fig. 1 *a* is the fore roll of the collar, and *b* the back roll or body. *c* is the fore roll and *d* the back roll of the pad, and *e* its body. 1 is an elastic metallic clasp or hook, which is hinged at 2 to a suitable piece secured to the body of the pad, and which is curved in the form of a circle, smaller than the circular section of the fore roll of the collar, which it clasps, and hence, since the clasp is tempered and elastic, it clasps the fore roll and secures the pad thereto. The outer end of the clasp is bent outward, as shown at 7 in Fig. 1, so that it will not abrade the collar when it is being clasped to the latter or taken therefrom.

A simple hinge, 2, may be serviceable to permit of movement of the collar upon the pad without the clasp becoming disengaged from the fore roll of the collar; but it is believed that if provision be made for the clasp 1 to swivel at the hinge the clasp will be better able to adjust itself to the fore roll of the collar, and to permit of movement of the collar upon the pad and of adjustment of the pad to the collar; hence Fig. 4 shows one method of swiveling the clasp at the place where it is hinged to the pad. Here the hinge-eye 2 of the clasp is flared outward at its ends, as shown at 5, so that it can swivel upon a cylindrical pin or rivet, 4.

In Fig. 5 the pin or rivet 4 is thickest in the middle, 8, and tapers toward the ends, while the eye 2 of the clasp is cylindrical. The eye 2 may be flared and the rivet 4 tapered, as above, in making a swivel-hinge.

In Figs. 1, 2, 4, and 5 a malleable-iron hinge-piece, 3, is shown adapted to receive the eye 2 of the clasp and the pin or rivet for hinging the clasp to the piece 3, and adapted to be riveted to the pad-body, substantially as my elastic clasps or springs now in use are riveted to the pad. The clasp-eye 2 might be cut out in the middle to receive the eye of the hinge-piece 3; but the construction shown is the best. The clasp 1 may be hinged to the pad in various ways which will provide for a swivel motion. Thus the metallic hinge-piece 3 may be dispensed with, and the hinge-pin 4 may be bent like a staple and riveted to the pad, as shown in Fig. 7; or the clasp may be attached to the pad by means of thread or a cord or strap, which may pass through the eye 2, Fig. 7, and the body of the pad, and have the ends sewed to the pad or tied together. A flat strap could be rounded at the middle where the eye 2 works upon it, and each of its ends could have a rivet passed through it, and thus be riveted to the body of the pad. The end of the clasp could have a slot cut near and parallel to the end, as shown at 9 in Fig. 6, so as to leave a narrow cross-connection, 11, around which a metallic or leather strap, 3, could be looped, as at 14, and which could be sewed to the body of the pad or riveted thereto by means of rivets 6. Such a clasp could be attached by stitching around the end 11 and to or through the pad. The hole in the end of the clasp may be like that shown in Fig. 8, and thread, a strap, wire, or a staple, 15, may be used to attach the clasp to the pad. The clasp itself need not be of sheet or strap metal, as shown, but may
716 be made of elastic wire bent into any form which has embodied therein a curved portion adapted to clasp and hug the fore roll of the collar and adjustably secure the pad thereto in substantially the same manner as does the flat metal spring herein shown and described.

The essence of this invention, then, is providing means for swiveling the clasp at the place of attachment for the purposes set forth.

I claim—

1. A hook or clasp composed of one section adapted to be attached to the pad and another section provided with the curved spring-hook adapted to clasp the fore roll of a horse-collar, and thus secure

the pad to the collar, the two sections being hinged substantially as set forth.

2. In combination with a horse-collar pad, a hook or clasp composed of one section adapted to be attached to the pad and another section provided with the curved spring-hook adapted to clasp the fore roll of a horse-collar, and thus secure the pad to the collar, the two sections being hinged substantially as set forth.

EDWARD L. McCLAIN.

Witnesses:
W. H. EVANS.
W. H. IRWIN.

717 Afterwards, to wit, on the tenth day of February, 1888, there was filed in said clerk's office an appeal bond in said entitled cause; which said appeal bond is in the words and figures following, to wit:

Appeal Bond.

In the United States Circuit Court for the Northern District of Illinois.

EDWARD L. McCLAIN
vs.
A. ORTMAYER & SON *et al.*
} In Equity.

Know all men by these presents that we, Edward L. McClain, the complainant above named, a citizen of the State of Ohio and a resident of Greenfield, in said State, and Samuel A. Kean, of Chicago, Illinois, are hereby held and firmly bound unto A. Ortmayer and Son, a corporation organized under the laws of the State of Illinois—Andrew Ortmayer, president, and Carl G. Ortmayer, vice-president, thereof—the defendants above named, in the sum of one thousand dollars ($1,000.00), to be paid to the said A. Ortmayer and Son, its successors or assigns, the said Andrew Ortmayer, and the said Carl G. Ortmayer, the heirs, administrators, executors, and assigns of each of them respectively, and to which payment, well and truly to be made, we, the said Edward L. McClain and the said Samuel
718 A. Kean, do by these presents, jointly and severally, bind ourselves, our heirs, executors, administrators, and assigns, firmly by these presents.

Sealed with our seals and dated, at Chicago, Illinois, this 10 day of Feb'y, A. D. 1888.

Whereas lately, at the December term, 1887, of the United States circuit court for the northern district of Illinois, in a suit pending in said court between the said Edward L. McClain, complainant, and the said A. Ortmayer and Son—the said Andrew Ortmayer, president, and the said Carl G. Ortmayer, vice-president—defendants, a decree was entered against the said Edward L. McClain, and the said Edward L. McClain has taken an appeal to the Supreme Court to reverse said decree:

Now, therefore, the condition of this obligation is such that if the above-named Edward L. McLain shall prosecute his said appeal to effect and shall pay all damages and costs if he fail to make his plea good, then the above obligation to be void; otherwise to remain in full force and virtue.

EDWARD L. McCLAIN. [SEAL.]
SAMUEL A. KEAN. [SEAL.]

Approved:
H. W. BLODGETT, *Judge.*

Endorsed: Filed Feb'y 10, 1888. Wm. H. Bradley, clerk.

719 NORTHERN DISTRICT OF ILLINOIS, *ss:*

I, William H. Bradley, clerk of the circuit court of the United States for said northern district of Illinois, do hereby certify the above and foregoing to be a true and complete transcript of the record of all the proceedings had in said court in the cause wherein Edward L. McClain is the complainant and A. Ortmayer and Son—Andrew Ortmayer and Carl G. Ortmayer—are the defendants, as the same appear from the files and records of said court now remaining in my custody and control.

Seal of Circuit Court U. S., Northern Dist. Illinois, 1855.

In testimony whereof I have hereunto set my hand and affix the seal of said court, at my office, in Chicago, in said district, this thirteenth day of February, 1888.

WM. H. BRADLEY, *Clerk.*

Endorsed on cover: N. Illinois C. C. U. S. No. 348. Edward L. McClain, appellant, *vs.* Andrew Ortmayer and Carl G. Ortmayer. Filed April 2, 1888.

Robert Clarke & Co., Printers.] [*April, 1891.*

UNITED STATES SUPREME COURT.

IN EQUITY.

Edward L. McClain

No. 348.] *vs.*

A. Ortmayer & Son et al.

BRIEF FOR APPELLANT.

STATEMENT OF CAUSE AND ABSTRACT OF PLEADINGS.

May it please your Honors—

This was a suit in equity by Edward L. McClain, complainant and appellant, upon three letters patent against A. Ortmayer & Son, a corporation of Illinois. These patents are severally for "improvements in horse collars," and are dated, respectively, June 20, 1882, November 7, 1882, and May 13, 1884, the two former having been granted to said appellant as inventor, and the last to John Scherling and L. D. Randall & Co., assignees of said Scherling, and subsequently assigned to appellant.

The bill of complaint, p. 2, is in the usual form in such cases; its allegations being in accordance with the above statements, and its prayer being for an injunction account of profits and other relief.

The answer of defendants, p. 9, together with an amended answer, p. 13, denies that the inventions relied upon were novel, or that the alleged inventors were, severally, the first and original inventors thereof, and also denies that the said improvements, severally, contain any invention when compared with the prior art. In reference

to whether the defendants infringed, the answer contained the following statement only: "These defendants, on their own understanding of the scope and meaning of said several letters patent, and on the advice of counsel in relation thereto, deny that they have ever, in any way, infringed upon the same or upon any claim thereof."

To this answer and amended answer, complainant filed the general replication.

Upon these issues the cause was prepared and argued by counsel, when the court found that the first McClain patent had not been infringed; that the second McClain patent was invalid, for that its invention was anticipated by that of the first McClain patent, and that the third, Scherling, patent was invalid, for that its alleged invention had been anticipated by the earlier patents to McClain. And that it had not been infringed, whereupon the bill was dismissed at complainant's costs.

We may remark here that, upon reflection, we agree with the learned judge of the Circuit Court as to his finding of the invalidity of the third, or Scherling, patent, and shall not assign any error because of his decision upon it.

PROOFS IN THE CAUSE.

Complainant, to sustain the issue upon his part, offered in evidence certified copies of the three patents already referred to, which were severally marked, in the order of their dates, "McClain Patents," Nos. 1, 2, and 3, the latter being the Scherling; a collar pad stipulated, at p. 26, to have been manufactured after the dates of the said several letters patent, and before the filing of the bill by the defendant corporation, and marked "Complainant's Exhibit Defendants' Manufacture." Complainant also called and examined (p. 29) James W. See, an expert witness, who testified that the invention recited in the first claim of the McClain patent No. 1 was, in his opinion, embodied in the exhibit "Defendant's Manufacture," and that he found the invention of both the claims of McClain patent No. 2 embodied in said exhibit "Defendant's Manu-

facture." He also testified with reference to the Scherling patent, whereupon complainant rested.

Defendant, to sustain the issue upon his part, offered in evidence thirty-two patents to anticipate the inventions secured by the said McClain patents, two of these being English patents and one of them being a Canadian patent granted to appellant; but, as this Canadian patent is of more recent date than either of the McClain patents upon which this appeal now depends, it is not believed that it can be used here for any purpose. These patents occupy the record from p. 382 to p. 428.

Defendant also, to sustain the same issue, examined five witness—Jenkins, Holt, Burbecker, Saltsman, and Parish—who testified to the prior use of safety-pins, curtain-rings *et similia*, which are alleged, in some way, to affect the novelty of appellant's inventions.

Defendant also, upon the same issue, examined William S. Bates, an expert witness, who compared the appellant's inventions with the various patents, safety-pins, etc., offered to anticipate them, and gave opinions thereon.

Defendant, to sustain the issue of non-infringement, examined the said expert witness, William S. Bates, together with Andrew Ortmayer, president of defendant corporation, and the witnesses Seyl and Peacock upon that issue.

Defendant to sustain the issue of non-invention, in addition to the opinions of said Ortmayer and said expert witness Bates, offered the testimony of witnesses Atzel, Blowney, and Stephen as to what amount of practical advantage or benefit had been conferred upon the art or trade by the introduction of appellant's inventions.

Complainant, in rebuttal, to sustain the issue of infringement upon his part, offered the testimony of the witnesses Blackadore, Elliott, Thiemann, Schlierbach, and Otto, dealers in complainant's and defendant's pads.

And, upon the issue of novelty, again examined the expert witness, James W. See, who explained the various

patents and illustrating exhibits offered by defendant upon that issue, and compared them with complainant's inventions.

And upon the issue of invention or no invention, he examined fifty-five different witnesses of extensive experience in the trade, and who resided and worked, or carried on business, at nineteen different towns and cities irregularly scattered between Albany, N. Y., at the East, and Kansas City, Mo., in the West, for the purpose of showing the benefit derived by the trade or art, more especially accruing to draft horses, from the introduction of complainant's inventions. In addition to this, and upon the same issue, but more immediately as a reply to certain testimony of said Andrew Ortmayer and said Bates, he introduced into evidence a copy of the file and contents of the Ortmayer patent, alleged in defendant's answer as the patent showing defendant's infringing manufacture, and under the alleged protection of which defendant alleges that it manufactures. This is printed at p. 370.

Appellant makes the following assignment of errors:

First. The decree of the Circuit Court is erroneous in adjudging that defendant did not infringe the invention set forth in the first claim of "Complainant's Exhibit McClain Patent No. 1," said patent being dated June 20, 1882, in and by the manufacture and sale of "Complainant's Exhibit Defendant's Manufacture," and by the manufacture and sale of other similar pads.

Second. The decree of the Circuit Court is erroneous in adjudging that the first claim of "Complainant's Exhibit McClain Patent No. 2," said patent being dated November 7, 1882, is invalid, and in not adjudging that the same is a good and valid patent.

Third. The decree of the Circuit Court is erroneous in not adjudging that the defendant had infringed the invention set forth in said first claim of "Complainant's Exhibit McClain Patent No. 2," in and by the manufacture and sale of "Complainant's Exhibit Defendant's Manufacture," and other similar pads.

Fourth. The decree of the Circuit Court is erroneous in adjudging that the second claim of "Complainant's Exhibit McClain Patent No. 2" is invalid, and in not adjudging that the same is a good and valid patent.

Fifth. The decree of the Circuit Court is erroneous in not adjudging that the defendant had infringed the invention set forth in said second claim of "Complainant's Exhibit McClain Patent No. 2," in and by the manufacture and sale of "Complainant's Exhibit Defendant's Manufacture," and other similar pads.

The fundamental error in this cause, we submit, is that the Circuit Court refused or failed to recognize that appellant had made a discovery of incalculable value—not merely a revolution in the art to which the matter relates, though unquestionably that was an incident of it—but a discovery, carried into practical operation by exceedingly simple means, which has done more good for the draft-horses of our land than all the societies for the prevention of cruelty to animals that the good genius of our times has developed, and of which every humanely constituted man has reason for just pride. More particularly, the error we complain of is that the learned judge insisted upon treating these patents as being for "Improvements" in existing devices; in refusing to see what our record so clearly demonstrates, that all prior existing devices for attaching pads to collars—and they had all been universally known for at least forty years—were utter failures, had been demonstrated to be failures over and over again; indeed this was almost a daily experience with the owners of draft-horses; but there was no remedy for it; if the farmer found that the pad, stitched securely to the collar, had, after being saturated with sweat or rain, become wrinkled and twisted, and not only had ceased to be a protection to the shoulder of the beast, but presented a surface as rigid, or nearly as rigid, as the collar itself; and instead of being like the collar, a uniform, hard surface, it presented a ridged or gnarled surface and its presence was a torture to the beast; if, we say, such person could afford the time to go to his harness maker for a new pad, and

secured by some, any, other mode to the collar, he could only get it tied or buckled on. If stitching had been such farmer's first experience of securing a pad to a collar, he would be willing to try any other mode suggested. If tied by leather strings, or similarly buckled and strapped, the pads twisted under the collar, and if such pads were made in two pieces—that is, not joined together at the withers or the throat—the pieces would fall down in the collar, and in either event the effect was to squeeze and bind the wind-pipe of the animal, and, unless released, would strangle him. However tightly such straps might be drawn and fastened—and they were sometimes drawn so taut as to break, or bend, the small roll of the collar—they still permitted slip to some extent, because they passed around the whole cross-section of the collar. In going down hill the tendency of the pad was to slip in front of the collar, and in going up hill the tension of the pull upon the hames, and thence to the collar, made the latter work the pad to the rear of it—every movement of the pad being to the inconvenience of the horse. The result is all too clear for the expression of a fair doubt that in every case where the farmer had some experience of this tie string, or strap and buckle method—and almost every user of draft-horses, at some time, had some such experimental experience—they either returned to the stitched-in pad, or, not uncommonly, they quit using such pads entirely, and their horses suffered the consequences.

The art was at this stage when the appellant took hold of it. He saw that notwithstanding these well known soft pads would give ample protection to the shoulders of horses, when securely stitched to the collar, and, indeed, would continue so to do until, by repeated saturation, their surfaces became indurated and so rough that their presence was a greater evil than the hard though smooth surface of the collar; he saw that it was not practicable to have them duly dried and smoothed out every night; for, to do that the pads would have to be removed from the collars, and this in turn would require a journey to the harness maker's shop at least once a day, or the establish-

ment of such a shop upon every farm; he knew that these pads were principally useful in the spring of the year when the horses, after standing in their stables all through the winter, were started into the spring ploughing with their hides soft and tender, and that the slightest rough usage, while they were in that state, lacerated their skins, and made those hideous sores upon their necks and shoulders with which all who had any opportunity for observing draft horses at that time were only too familiar; but he knew, too, that the farmer could not forego the constant use of his work horses from the time he commenced to plough in the spring until late in the summer; the farmer's working season is too precarious for that; and, if these circumstances produced sores upon the horses in the spring, they must continue to suffer them throughout the season.

He engaged in the pad business for the purpose of more thoroughly comprehending the problem (A. 4, pp. 268–9). This problem was not difficult to state. It was simply to bind the pad with absolute security to the collar, which binding must be of such character that the pad could be immediately separated therefrom by the teamster, for drying, or the insertion in its place of a dry pad, and, at the same time, the binding devices must be such that the pad could be instantly replaced, when dry, by the teamster.

He saw that if the pad were clasped to the collar by his hands, that would accomplish the purpose; but then he must have artificial hands of requisite strength, and that would clasp and unclasp with facility. He adapted this conception to practice, and the clasping hooks, shown in his patents, are the means devised by him for that purpose.

The prominent question in this cause, if we may be pardoned for again stating it, is: Has this appellant made a patentable discovery?

We submit that the answer to this question must depend exclusively upon the further question as to the bene-

fit that has resulted from its introduction; in other words, if your Honors please, we propose to submit, with deference, that there is no test known to the law, or that will stand the test of good sense, as to whether any particular invention or discovery is patentable, other than its effect upon useful arts; and, even if apparently a little out of order, we propose to submit a few remarks upon this question before discussing the details of the claims, etc.

Without citing particular cases, we admit there are several, as well at the Circuit as of this court, which state, substantially, that "utility is not conclusive of the question of invention," or "not always conclusive" of that question, but we know of no case which attempts to state circumstances wherein the *amount* of the improvement of the particular art would not be an absolute test of this question. Nor are we able to imagine circumstances that could, by possibility, limit in any way the application of that test.

First. No other test was known to the English law as to what was a "New manufacture" than the benefit produced to the useful arts. And first we will cite the justly celebrated dictum of Buller, J.: " . . . Yet if there be any thing material and new which is an improvement of the trade, that will be sufficient to support a patent. . ." Webster's Pat. Cases, p. 71.

Upon this Webster comments as follows (note *e*, same page):

"This dictum of the learned judge seems to present an admirable test of the sufficiency of an invention to support letters patent. The improvement of the particular trade is the principal upon which the policy of such limited monopolies rested, and in many cases the materiality and importance of the change can only be judged of by the effect on the result, which effect is tested by the improvement in the trade in the commercial sense of the term, that is, by the production of the article as good in quality at a cheaper rate, or of a better quality at the same rate, or both these partially combined. Thus the latter words, 'improvement of the trade,' define and ex-

plain the preceding, and the utility of the invention, as ascertained by this result, becomes, in cases of this kind, the real test. In other cases, as when some particular instrument or machine is the subject of the patent, the same test is indirectly applicable. This view is suggested by the Court of Exchequer in their elaborate judgment in the case of *Morgan* v. *Seaward*, Parke, B.: 'On a review of the cases, it may be doubted whether the question of utility is any thing more than a compendious mode, introduced in comparatively modern times, of deciding the question whether the patent be void under the statute of monopolies.' 2 M. & W. 563. So that whenever utility is proved to exist *in any great degree*, sufficiency of invention to support a patent may be presumed; and if such invention be any manner of manufacture, and new, and the specification be sufficient, the letters patent for such invention will be valid in law."

"Upon this test the decision in Brunton's case was correct, his anchors not being so good as those made in the old way."

Mr. Webster, in the last above paragraph, refers to *Brunton* v. *Hawkes*, 4 B. and Ald. 542. Brunton's patent was for two separate articles, *First*. A link of a chain, which link was braced by a cross bar, to resist the tendency of the sides to press toward each other, and the link to consequently increase in length when under the ordinary tension to which chains are subjected when raising or lowering anchors, and in other similar uses. Cross bars had been before applied to such links for this purpose, but their ends were conical, or pointed, and entered appropriate holes in the sides of the links. These holes weakened the link. Brunton made the ends of his cross bars broad and so concaved that the sides of the links fitted in these concave surfaces. This braced the link without weakening it, and if the patent had been for this alone it would have been sustained. But inasmuch as the patent also covered a certain construction of anchor which was shown not to be an improvement of the trade, the latter was held to be a false suggestion and vitiated the whole patent. This is an

excellent illustration of the use customarily made in England of the amount of improvement in the particular trade as a test of invention.

Dudley's Patent. Webster's Patent cases, p. 14*:* This patent was for the sole right to make iron by means of coal as a fuel. Theretofore, iron had been made by the use of charcoal only, but, as the patent recites: "Finding that the working and making of the said iron, by the means aforesaid, within this kingdom, will not only in itself tend to the public good thereof, but also thereby the great expense and waste of timber and wood converted into charcoal and consumed upon iron works will be much abated, and the remnant of wood and timber within this land will be much preserved and increased; of the want thereof not only ourself, in respect of provision for our shipping and otherwise, but also our subjects, for many necessary uses are very sensible." This patent had been granted before the statute of monopolies, but was by the terms of that act specially excepted from its general operation. Idem, p. 32.

While it is true that this patent never underwent the ordeal of a litigation, it is also true that it has been commonly referred to by the English courts, and so far as we know, there has never been a doubt expressed therein as to its validity.

Can any one point to any element of invention in this patent unless such invention be tested solely by the improvement of the trade?

Neilson's Patent. This is one of the most exhaustively litigated patents referred to in the English books. The various opinions of the English judges upon it have been referred to in many of the opinions of this court, but always, we think, upon the single question as to how far a patent may legally cover a principle. Upon that qustion the discussions of counsel and of the various tribunals through which the two leading cases passed, contain a mine of legal wealth. Both of these cases—*Neilson* v. *Harford*,

and *The Househill Company* v. *Neilson*—are reported in Webster's Patent Cases, and upon these reports the few remarks we propose making upon this patent will be based.

The discovery made by Neilson was this: That if the air blown into a blast furnace was heated to a considerable degree before it entered the furnace it would occasion a great saving of fuel, and at the same time improve the quality of the iron. It was recognized by all who were competent to form an opinion upon the subject, that this discovery was of vast benefit to the iron industry, and thereby of far-reaching importance to the prosperity of the country.

The discovery astonished people engaged in that branch of industry, because it was known, and matter of common observation, that such furnaces operated better in cold weather than they did in warm weather. The natural and ordinary inference was that the cold air was more beneficial than warm air. Neilson's discovery taught them that it was the dryness incident to cold air, as compared with the dampness of ordinary atmospheric air at a higher temperature, that was the cause of the phenomena with which they were familiar. It taught them further that artificially heated air would be still drier than the cold air, and at the same time its use would avoid the chilling effect, and consequent waste of fuel, of the cold air.

Neilson's patent for this beautiful discovery was a most inartificial bungling instrument—see it, p. 273, *Id.* It was difficult to say, from an examination of it, whether the inventor intended to claim the new process of using heated air, in accordance with his real discovery, or whether he intended to claim an improvement in mechanical apparatus for heating air. The difficulty was intensified from the fact that the devices described in his patent for that purpose were almost useless for the intended purpose, and the instructions contained therein displayed the grossest ignorance of well known principles of the construction of such devices. But Neilson had made a most beneficial discovery, and the iron manufacturers of the kingdom were not slow to take the benefit of it, using, as

they did, the familiar scientific knowledge of the time in constructing air-heating apparatus, by which they could, and did, get the full advantage of Neilson's discovery. But this air-heating apparatus, used by the infringers, bore no resemblance in principle, construction or form to that described in the Neilson patent; nor had the former derived any aid from the specification of the latter in the construction of their air-heating apparatus. It was thus apparent that unless the patent could be construed to cover the use of heated air—heated between the blowing apparatus and the furnace—in a furnace, the inventor could not be rewarded for his most beneficial discovery.

Hence arose the discussion whether a patent would cover a principle, which discussion was participated in by the best legal minds of England of that day, and cover several hundreds of pages of the before-referred to book.

And now the question presents itself why all this forensic disputation, all this labored and anxious work upon the part of the bench, unless it be that the spirit of the English law—the best representative of the aspirations of the people—demanded, in the interest of the growth and prosperity of their manufacturing industries, that when a discovery of great practical importance was given to the public in good faith, and in the mode pointed out by law, the discoverer should get the reward promised by the law of the land?

Vide remarks of Pake B., p. 309, and pp. 371–2, *Id.;* also of Alderson, B., pp. 337 and 342, *Id.;* also of Lord Justice Clerk Hope, pp. 683–86, *Id.*

Of the same character is the patent to Crane, p. 375, *Id.;* and *Crane* v. *Price*, p. 377, *Id.*

When Crane took his patent Neilson's hot blast was in general use for the manufacture of iron with bituminous coal. His patent, shortly stated, was for the use of anthracite coal in connection with Neilson's hot blast at about 600° F., and his patent was sustained. The history of the necessity for, and the benefit to be derived from, Crane's discovery, give the reasons for sustaining his patent.

At that time there were extensive beds of iron ore in Wales, but as there was not a sufficient supply of bituminous coal within a usable distance of these iron deposits, the iron ore was not used, and it was believed to be utterly valueless under the circumstances. There were also, however, contiguous to this iron ore, vast beds of anthracite coal, but it was looked upon as a curiosity merely—no practical or beneficial use had ever been made of it. Crane's discovery, as above stated, showed that each of these materials had great value; or, rather, it might be well said, gave value to them. The iron produced by Crane's process, it was admitted, was a better iron than that produced by bituminous coal with or without the hot blast.

The problem presented and solved in *Crane* v. *Price* was where was the invention that dignified Crane's discovery into a "new manufacture," and entitled it to the protection of letters patent?

The iron ore was old, the anthracite coal was old, the hot blast was old, and there was only new the knowledge that iron could be made by means of anthracite when used with the hot blast!

But there was a discovery, and this discovery was of great importance to the arts, it benefited the country, in in short, the "materiality and importance of the change was judged of by the effect on the result, which was tested by the improvement in the trade in the commercial sense of the term."

Says Sir N. C. Tindal, C. J., in delivering judgment: "The only question, therefore, that ought to be considered on the evidence is, was the iron produced by the combination of the hot blast and the anthracite a better or a cheaper article than was before produced from the combination of the hot blast and the bituminous coal; and was the combination new as to the public use thereof in England?" P. 410 *Id.*, and see balance of this and following page.

Hall's Patent and Hall v. *Jarvis*, p. 97 *et seq.*

This patent was for the use of a gas flame, as distinguished from a flame from the burning of oil, to burn off the superfluous fibers of lace.

It appeared upon the trial that English made lace would not compete with lace made on the Continent, because the latter was clean, and without any of the fuzzy, adhering, and superfluous fibers that adhered to all English made lace, and gave it what is called in the case a cloudy appearance. The reason for the difference appears to be that the continental lace was made from linen, while the English lace was made from cotton; but was, with the exception noted, as good and desirable as the former. Hall discovered that by using the ordinary expedient of a narrow chimney above the lace, to be gassed, to draw a current of air from below up through the lace, the flame of gas would pass up through the lace with such current and burn off the superfluous, fuzzy, substance, without injuring the lace. But there was nothing new in the means described other than the substitution of gas flame for oil flame. This discovery enabled English lace to compete favorably with the linen lace of continental manufacture in foreign trade, and that is all there is of it, as a test of its being a "new manufacture," and the patent was sustained.

Muntz Patent and Muntz v. *Foster*, and extension of the patent, 2nd part of Webster's Pat. Case, pp. 85 et seq.

This patent, and the proceedings upon it, are a very forcible illustration of the test under discussion, and of its value. The invention consisted in a certain alloy of copper and zinc for the sheathing of ship's bottoms. Copper was in universal use for this purpose, but because of its rapid oxidation and consequent short life it was a very expensive sheathing. It appears that Sir Humphrey Davy had succeeded in finding an alloy--the components are not stated in the report—which absolutely resisted the oxidizing

effects of the water, and retained a bright surface under all circumstances. But it was found that barnacles adhered to such a surface, and in such prodigious quantities as to impede the progress of the vessel through the water, hence Sir Humphrey Davy's discovery was of no practical utility.

Muntz's alloy oxidized slightly, but sufficiently to prevent barnacles from adhering, and, at same time, the waste was relatively so little from rust that the discovery was of very great value from an economic point of view. It had also certain other advantages, but they are not relevant here.

There was proof that this alloy had been made and sold publicly, to all desiring it, more than twenty years prior to the date of the Muntz patent; but there was no proof that any body, makers or users of it, prior to Muntz, had knowledge of this valuable property of the alloy. The question was whether the patent, under these circumstances, was valid? It was held valid.

See summing up of Sir N. C. Tindal, C. J., p. 103 et seq.

See also judgment of Lord Brougham in re. of the extension, p. 119 et seq.

And see *Minter* v. *Wells, et al.*, p. 134 *id.*

It can not be pretended that, in any of the cases we have cited, there was any other test, or aid in the inquiry, as to whether the subject was a "new manufacture" so as to be entitled to the benefit of a patent than the *amount of improvement* produced by it in the trade, in the commercial sense, and the list might be extended almost indefinitely, and to every class of subjects.

Indeed, we might well ask if any other motive ever existed in or for the numberless discussions, scattered throughout the English books, upon the question of "Patenting a Principle," than the evident determination upon the part of the courts to sustain patents covering discoveries that had added *materially* to the useful arts, where the specification and claim had run foul of the law.

And, we submit, we are at liberty to state, as the result of this examination, that in England at least, the test

of whether any particular new thing, not being in violation of public morals or policy, is entitled to a patent is, and always has been, resolvable by an answer to the inquiry: What amount of improvement has it wrought in the useful arts, or in any of them?

And we may remark, in passing from the English authorities, that, when duly considered, a most significant side-light is thrown upon this question by the familiar fact that under the statute of monopolies, which authorized patents only, "of the sole working or making of any manner of new manufactures, within this realm, *to the true and first inventor and inventors of such manufactures*, . . ." patents are and have ever since that enactment been held valid when the patentee admitted that he was not the inventor at all, in the sense in which that word is used in construing our statutes, but had received the invention as a communication from abroad, or had actually stolen it from a foreign manufacturer, if it was new within the realm.

Further, we submit that the amount of improvement of the trade is the only legitimate test of invention in this country; that there is no difference, in this respect at least, between English law and our own. Indeed, we dare affirm, with deference, that par. 8 of sec. 8, Art. 1, of the Constitution, introduced this test of patentability from the system of patent law whence ours is derived. Let us look at it:

8. "To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

First. We would observe that it is a legal and legitimate inference that, when we borrowed from the English people the patent system, we intended to adopt also the same tests that had been used and found salutary by them as to what were the proper subjects of protection; and this view is strengthened by the consideration that it was the material benefits that had been derived from this system by the English people that we also sought in its adoption.

Second. But it may be more profitable to consider that the things, the exclusive right to which were to be secured,

were "discoveries." "Inventions" *eo nomine* are not mentioned here. There is an obvious difference in the words. And is it not all too clear for argument, that the word "discovery" correctly describes the things that had been protected by those who actually founded and nurtured the patent system—the English courts—and that the word "invention" does not; and, further, that it was the improvement of useful arts that had brought wealth and power to Great Britain, as an incident to *this* protection, that we sought in adopting their system?

If it be said that "invention," as used in our statutes, must be considered to have the same signification as "discovery," *as used in our constitution to express the effect of the English decisions*, we reply, yes; if, in practice, it receives the natural interpretation of "discovery;" but if "invention" be only averred to have the same signification as "discovery," and we then, having thus settled it that the words are synonymous, proceed to give both the meaning naturally belonging to the word "invention," and ignore "discovery," with its obviously differing signification, we lose our moorings.

Has this been done or not?

"Invention" involves an inquiry as to the amount of brain work, or mental effort, that has been expended in the pursuit of it. There is no such inference arising from the use of the word discovery, as we submit.

Again, the language of the constitution under consideration is not "the useful arts," but "useful arts;" *i. e.*, any useful arts, and the things to be secured are discoveries having reference to science or useful arts. Can it be seriously contended, in view of this language, that there was any test present to the minds of the framers of this instrument, as the price of this exclusive right, other than that which tended to the progress of science or useful arts; *i. e.*, material development?

And how can it be told in any given case that any discovery or invention is the thing contemplated by the constitution, or within its purview, except by the inquiry: What, or *how much*, benefit has been conferred by it upon

science or a useful art? The other inquiry: "Is there invention," unless conducted by minds rigidly trained in the spirit of the law, is apt to, and, as we submit, not uncommonly has, become demoralized into an examination as to the amount of mental effort that has been expended, which, in its turn, necessarily resolves itself into an inquiry for complexity of construction.

Men may repeat the oft repeated aphorism that the highest order of invention is produced, or often produced, by the simplest means until they weary our ear-drums, and until the words have lost all semblance of sensible meaning; but just so long as they seek after "invention" instead of "discovery," that is, seek after a thing, the criterion of which is the greater or less amount of brain work that has been expended, instead of that which is tested by the amount of improvement of science or a useful art, their inquiry will as surely degenerate into an inquiry for ingenuity, in its turn to be tested by complexity of construction, as gravity will bring matter to the earth.

We do not deem it necessary to discuss the American cases in further support of this argument, but in the main will refer to one recent discussion which has done this work better than we could hope to do it. We refer to

Morley Machine Co. v. *Lancaster*, 129 U. S. Rep. 263. Nor do we think there is any substantial difference between the phrase "Primary Invention" as there used, and "Discovery" as used in the constitution.

There is, however, one opinion in the U. S. Reports that we can not resist the temptation to refer to before closing this discussion. We refer to the dissenting opinion of Mr. Justice Nelson in *Le Roy* v. *Tatham*, 14 How. Rep. 177.

That this is not *merely* a dissenting opinion, we beg leave to recall to your honor's recollection by a short statement of the history of that controversy.

A bill in equity was filed upon the patent in New York. From this there was an issue out of chancery to try the questions of novelty and infringement. A writ of error was taken from this to the Supreme Court, based

upon alleged error in construing the patent, in the charge to the jury. This court sustained the bill of exceptions and reversed the judgment, and it was against this judgment, setting aside the judgment below, that Mr. Justice Nelson dissented.

When the equity cause came on subsequently for hearing in the Circuit Court the judgment of this court was not satisfactory to the conscience of the chancellor, and he disregarded it.

The equity cause was appealed, and the report of the opinion then delivered will be found in 22nd How. Rep. 132. The same Justice—McLean—delivered the opinion of the court in both cases. In the latter case the patent was sustained, and this court then agreed with Mr. Justice Nelson's reasoning in the dissenting opinion. Indeed we think your honors will agree with us that the opinion of Mr. Justice Nelson ought to be taken, and was taken by the then justices of this court, as the opinion representing their action in the latter case; the later opinion of Justice McLean containing nothing in particular, except a recognition that by virtue of the full proofs in the appeal case the court had in the meantime been advised that the patent was intended to secure a discovery of great importance to the arts; and which, it may be inferred, could not have been so well shown in the skeleton incorporated into a bill of exceptions to a charge of the court in a law case.

Recurring to the opinion of Justice Nelson, we only regret that we can not quote it here *verbatim* as a part of our argument, for, in our humble opinion, it has no superior, if it has an equal, in the juridical literature of England or this country, for lucidity and accuracy upon this branch of the law; and especially upon the question upon which we have, if feebly, at least earnestly labored above, and hope your Honors will read it in this connection.

One more remark before passing from this discussion:

We will hazard the statement that as much "inventive thought" has been expended, during the present century, upon the effort to produce "perpetual motion" as has been expended, during the same time, upon the elec-

tric telegraph and the telephone, and all the improvements made upon both. Nor is it because this labor has not been educated, or directed in the proper channel, or that it has not brought forth most ingenious combinations of devices that it is not recognized, or rewarded, by the patent system; but simply because it has not benefitted science or the useful arts—because it is not within the "Bargain," happily so-called.

And we submit that the only rational dividing line between all the different varieties of cases that can be suggested, so far as the applicability of this test of their patentability is, severally, concerned is: 1st, Those cases where it is self-evident to every body that a great or positive improvement or advance has been made in a useful art; and 2nd, Those cases where, from want of familiarity by the courts or by people generally, with the particular art to which the improvement relates, evidence may be requisite as to the effect upon the art of the improvement that may be in question.

And even this dividing line is more imaginary than real, for it would be easy to suggest cases that would belong to the first of these classes, to people of relatively advanced education, or experience of the subject; while, to people of less information, or narrower experience, the suggested cases would belong to the second class—would require proof.

In other words, this dividing line does not divide the cases, but only the people who judge of them. In short, the applicability of the test, when considered apart from the question of whether or not proofs are necessary, is, as we submit, universal.

We conclude this subject by the inquiry, is not this view in harmony with the spirit of the decisions of this court during the last decade—we refer fearlessly to the large number of decisions holding patents void for not showing invention?

Such, at least, is our reading of them.

The claims of the two patents upon which the appeal depends are as follows (McClain Patent No. 1, p. 360 et seq.):

1. "As attachments to a sweat or other horse collar pad, the elastic spring s s, substantially as described and for the purpose set forth."

McClain Patent No. 2, p. 362 et seq.

1. "As an attachment to a horse collar pad, or other harness pad, and as a means of adjustably attaching a pad to a horse collar or other part of harness, the elastic single-roll or single-curved spring *s*, constructed, arranged, attached and operating substantially in the manner shown or described, and for or with the purposes set forth."

2. "The combination with a horse-collar pad, of elastic single-roll or single-curve spring *s*, substantially in the manner shown or described, and for the purposes set forth."

There is another claim in the first of these patents, but it is not in issue.

We have no objection to admitting frankly, if it be desired, that these claims are not artistically, nor even artificially drawn; and, perhaps, the same admission would apply generally to the solicitor work done upon these patents; but the fact that appellant permitted a school-fellow and friend, without prior experience, to attend to this business, while it may indicate a certain kind of callowness upon his part at that time, does not appear to us to offer a sufficient basis to justify destructive criticism.

It is substantially admitted, 1st, by the opinion of the Circuit Court; and 2nd, by the facts proved by this record, that the claim of McClain Patent No. 1, quoted, is valid; and, it is substantially admitted that, but for the duplication of the letter *s*, that claim would be infringed by the defendant's manufacture.

With reference to the other patent, it is substantially admitted that defendant's manufacture infringes both the claims; nor is there any question in the case as to the validity of either claim, except what it is alleged arises from the similarity between the inventions of the two patents.

In other words, notwithstanding the pretense, involved in the attempt to befog the issue with alleged defenses, the

of the niche that this invention has made for itself and perfectly filled.

Q. 11. "Suppose you were now to cease selling a pad with the hook on, substantially like the hook on the 'Succes' pad, but were to sell other pads fastened to the collar, by any or all of the other modes in practice, what effect would that have upon your pad trade?"

A. "Lose the trade."

We refer to the large paging in the following citations as we do in all our references, substantially the above question to a number of other witnesses: P. 237, A. 11; P. 231, A. 10–11; P. 221, A. 8; P. 215, A. 13–15; P. 211, A. 12; P. 207, A. 15; P. 203, A. 10–11; P. 173, A. 19; P. 137, A. 9; P. 125, A. 9, 10 and 11; P. 107, A. 15, 16; P. 103, A. 10; P. 97, A. 18; P. 92, A. 18; P. 81, A. 36.

While we naturally feel some delicacy in suggesting to your Honors what, or how much, of this testimony, upon the question of the benefits conferred by this invention, you should read, still we feel bound to say this, that the more of it you read the safer we will feel; and, further, the more familiar you become with it the less necessity there will be for our making assertions as to what it proves. In addition to the foregoing we beg leave to suggest the reading of eight depositions in their entirety. Four of them are of retail dealers, and four of them are of jobbers—called in the record McClain's agents, this because each signed a contract which is for the benefit of the retail dealers, and a copy of which is printed at p. 335—and their residences are territorially scattered from Albany, N. Y., to Atchison, Kan. We refer to the depositions of A. F. Risser, p. 54; Charles F. Steinacker, p. 106; Marion Srite, p. 115; Isaac Meyers, p. 162; Hiram Herrick, p. 176; William C. Peters, p. 205; Adam P. Brown, p. 230; and David Hannay, p. 251.

There have been intimations in the cause that the admittedly marvelous success of this invention is due, in part, to adventitious aids, principally advertising. So far is this from the truth, and indeed so thoroughly absurd is it, when looked squarely in the face by a person familiar

with the capacities of advertising, that we dislike exceedingly to so far dignify it as to notice it. But if your Honors will read the deposition of appellant, p. 268, and there is nothing in the record conflicting with it, and the deposition of the witness Brown before referred to, and there are several depositions of like tenor in the record, we will deem that you are in the possession of the antidote to this argument, viz: the facts of the case.

ADMISSION OF DISCOVERY AND INVENTION ARISING FROM THE APPLICATION FOR, AND GRANT OF, A GREAT NUMBER OF SUBSEQUENT PATENTS, OSTENSIBLY FOR IMPROVEMENTS UPON THE PATENTS IN ISSUE, BUT ALL EMBODYING McCLAIN'S DISCOVERY AND INVENTION.

About thirty such patents have been issued, and we subjoin a list of them:

No. 284,658, dated Sept. 11, 1883, to Osmer & Grier.
No. 302,610, dated July 29, 1884, to C. H. Wentz.
No. 312,082, dated Feb. 10, 1885, to R. Bronson.
No. 318,505, dated May 26, 1885, to B. F. Rice.
No. 321,155, dated June 30, 1885, to J. Straus.
No. 331,813, dated Dec. 8, 1885, to *A. Ortmayer.*
No. 335,143, dated Feb. 2, 1886, to *A. Ortmayer.*
No. 335,382, dated Feb. 2, 1886, to W. H. Osmer.
No. 341,719, dated May 11, 1886, to C. V. Bauer.
No. 343,880, dated June 15, 1886, to Frank Wiggins.
No. 355,411, dated Jan. 4, 1887, to *A. Ortmayer.*
No. 362,348, dated May 3, 1887, to J. W. Albright.
No. 364,464, dated June 7, 1887, to L. T. Anderson.
No. 367,423, dated Aug. 2, 1887, to John C. Mendenhall.
No. 369,496, dated Sept. 6, 1887, to Fredk. Benoit.
No. 372,294, dated Nov. 1, 1887, to Fredk. Benoit.
No. 372,587, dated Nov. 1, 1887, to W. Williams.
No. 375,111, dated Dec. 20, 1887, to E. E. Withey.
No. 377,152, dated Jan. 31, 1888, to C. J. Gustaveson.
No. 378,239, dated Feb. 21, 1888, to E. Q. Darr.
No. 383,388, dated May 22, 1888, to J. S. Cusson.
No. 395,171, dated Dec. 25, 1888, to E. F. Pflueger.
No. 401,859, dated April 23, 1889, to L. H. Scruggs.

No. 417,893, dated Dec. 24, 1889, to W. Williams.

No. 420,892, dated Feb. 4, 1890, to F. R. Smith.

No. 435,702, dated Sept. 2, 1890, to John Loos.

No. 436,695, dated Sept. 16, 1890, to R. W. Caldwell.

No. 20,456 (Design Pat.), dated Jan. 6, 1891, to E. F. Pflueger.

No. 445,590, dated Feb. 3, 1891, to C. H. Wentz.

No. 448,071, dated March 10, 1891, to E. F. Pflueger.

Each of these patents shows the McClain clasping hook, and each claims some addition or detail, or contortion of the material, as an "improvement." Each of them, according to the wisdom enthroned for the time being in the Patent Office, involves an invention. The learned expert witness for the defendant, who is endowed with the usual wisdom of his class, and sheds it ungrudgingly into this record, is of opinion that while complainant's patents contain no invention, defendant's and most of the others do contain invention, "because they each relate to some specific improvement on the general subject-matter, which improvement is not shown in the prior art, and the patents are each valid when limited to the improvements which it recites." An. 32, p. 358. And while counsel for defendant have *not formulated* just this argument, it is unquestionably the logic of their position.

We respectfully submit that these patents illustrate the truth, or falsity, of the argument above attempted as to the importance of "discovery" as distinguished from "invention."

When a valuable discovery appears in the manufactures of the country, and especially if it be so valuable as to have become, or is likely to become, indispensable, that class of the community known as professional inventors proceed to appropriate it. Their first step is to get a patent upon some modification, or change of form of the thing, embodying, of course, the original discovery. Having obtained that, they are in a position to go into a legal contest, and call a learned expert to compare the "complainant's and defendant's patents." Such patents, and a not inconsiderable proportion of the patents issued belong

to this class, are, and are well understood—outside of the courts and Patent Office—to be in the nature of licenses issued by the Patent Office, authorizing the grantees to infringe the patent that such second patent purports to be an "improvement" of.

The examiners, under the system of examination that obtains in the Patent Office, when an application is made for a patent for something radically new, something involving a valuable discovery, and which, having no prototype, of course has no special class in the Patent Office, proceed to compare it with *similarly formed things*, if any are to be found in other arts, or classes; and, likely as not, by their system of cheese-paring, or what they call "references," usually a comparison of forms, such application before it gets through to issue has been so emasculated as to be almost valueless—that is, most of them do this, but we would not say all, for there are nearly as many working theories of patentability as there are examiners in the Patent Office. But let there be, as the consequence of some important discovery, an art started, and a class or sub-class established for it in the Office, then every applicant whose alleged invention belongs, by virtue of its subject-matter, in that class or sub-class, will certainly get a patent if the applicant has enough mechanical brains to vary the structure of his device from the other forms that have thus far preceded him in that sub-class; for now such applicant, according to the established order, drops as matter of routine into his appropriate subdivision, and by the similarity or dissimilarity of applicant's device to the examiner's stock of references the result is determined. These are not misstatements or exaggerations to any extent.

In other words, if your Honors please, if a man has made a "discovery" there is grave doubt, in practice, whether he is entitled to the protection of a patent; but if another has made an "invention" or "improvement," and is desirous, by means of it, of pirating a discovery, he will get a patent immediately.

To this not uncommonly is to be added the consideration that the "discoverer," or "primary inventor," not

being, generally speaking, familiar with such matters, it being his first, and probably will be his only, experience—for the men who confer substantial benefit upon the arts are very rarely professional patentees—will be likely to fall into the hands of the unskillful solicitor and suffer injury in that way; but the professional inventor never makes that mistake. In short, if we may be pardoned a vulgar illustration, the dies are loaded against an honest and unsophisticated discoverer in all directions.

In this connection we propose a short examination of the testimony of Andrew Ortmayer, president of the defendant corporation, and patentee, under the protection of whose patent defendant alleges in its answer it manufactures the infringing clasping hooks; this for the purpose of further illustrating and practically testing the statements above made. This testimony is also useful in considering the question of infringement if there be properly such a question in the cause.

ANDREW ORTMAYER'S TESTIMONY.

Rec. p. 317, *et seq:* Andrew Ortmayer has been familiar with sweat pads for horse collars since he was twelve years of age, that is, for forty-eight years before his testimony was taken; and has been handling them in his own business since 1854—thirty-three years. A. 1, 2, and 5.

The bulk of his pads, up to the time he commenced to infringe appellant's patents, were stitched to the collar; some few of them having been attached by tie-string, or by strap and buckle, and some without any fastening whatever. A. 6, 8, and 9. The tie-string and strap and buckle methods of attachment have been known as long as he can recollect. A. 14.

These pads were made sometimes of one and sometimes of two pieces. A. 8.

He used no other means of attaching pads to collars than stitching where he could avoid it, as we read his testimony. He says: "A few—sometimes a customer

wanted us to put on straps and buckles and tie-strings for fastenings." A. 6. See also A. 11.

"The first detachable metallic hook for attaching a sweat pad to a collar that he ever saw was such as shown in the McClain Patent No. 2 and upon the McClain and Anderson pads." A. 53. And the first McClain and Anderson pads that he ever saw had this hook upon them. A. 55.

He commenced to sell the "Success," or McClain's clasping hook pad, between two and three years prior to October, 1886. A. 48, 50.

He dealt in McClain's pads "a year or more" before he applied for a patent for a clasping hook. A. 54.

He refused to deal in McClain's clasping hook pads when they first came out, and continued this refusal to handle them until compelled to do so by the demand for them. And even then he did not keep them in stock, or purchase them from complainant's firm, but purchased a few from his neighbors from time to time, and this only when he could not fill an order from his own manufacture, which had no clasping hooks. But, notwithstanding his resistance, the demand for this hook grew so rapidly that he was very soon compelled to face the alternative of losing his pad trade or handling the hook pad. He then commenced to handle it, and started with his preparations to infringe complainant's patents, for the reason that "AS A MANUFACTURER OF SADDLERY GENERALLY, AND AMONG THESE SWEAT PADS, I DISLIKED TO BUY THINGS OUTSIDE WHICH I COULD MAKE JUST AS WELL MYSELF." Part of A. 85; A. 51, 52, 54, 84, and 85.

The foregoing is a just and accurate synopsis of the testimony referred to, and it is submitted, in passing, that the above quotation is without parallel for its unblushing effrontery, its utter contempt of the law, and disregard of the rights of others.

The clasping hook possesses no advantages over other and older modes of securing pads to collars (A. 22 and 83), but they sell in large numbers "by preference of the individual buyers." A. 17. He admits that the majority of

pads sold by his house have the clasping hooks (A. 76–78), but declines to give exact figures, as a basis for an accurate calculation. A. 79 to 81.

In answers 34 to 37 and 96 to 100, he gives his ideas of invention. In a half-hearted way he insinuates, rather than asserts (34 to 37), that it required no invention to make the devices shown in complainant's patents to a person familiar with safety pin, Jenkins No. 3. In A. 96, *et seq.*, he says, substantially, that the device shown in his own patent required invention. "*I thought mine was an invention because it was an original thought of mine. It don't require much skill to make it after the thought has been conceived. I still think the same way.*"

Taking his answers 97 to 100 together, while their obvious contradictions make it not a little difficult to assert what he really means, we think he desires to be understood as saying that his prior familiarity with the McClain clasping hook, shown in McClain Patent No. 2, gave him no idea upon the subject of his own hook, which latter is substantially different, and a patentable invention; yet, if he had seen, prior to his invention, a safety pin like Defendant's Exhibit Jenkins No. 3, it would have so suggested to him the nucleus of the invention that his hook, when produced, would not have been a patentable invention *of his*; that is, the germ or inventive thought of his hook is not found in the McClain hook, but is found in the safety pin Jenkins No. 3. He does not, nor do his counsel, as we understand them, mean to admit that the Ortmayer patent does not contain patentable invention, for they say that the invention secured thereby is not in the clasping hook simply, but in *that*, in combination with the leather loop, by which it is attached to the pad.

In reciting their argument, it ought to be borne in mind that Ortmayer admits (A. 34) that he had, for some years prior to the time of his alleged invention, been familiar with safety pins which are substantially like Jenkins No. 3. And, further, defendants have put into their proofs evidence that these safety pins were known to the Spartans, and have been known ever since. P. 282, A. 6.

If were correct, then, defendant says that there is no invention in any of the complainant's patents, and further, to be consistent, that the only invention in his patent is the leather loop for connecting the hook with the pad; that there is nothing in common, at least of an inventive character, between complainants inventions and defendant's hook; but that there is a common thought involved in the production of the safety pin Jenkins No. 3 and the defendant's clasping hook.

We are tempted to ask, in passing, is not this statement of this defense its most perfect answer?

Mr. Ortmayer has testified that at the time he made his invention he had never seen the Scherling patent. We believe him. The hook of the McClain Patent No. 2, with which he was familiar, was a sufficient suggestion of his clasping hook. But the file and contents of his patent is in evidence, as "Complainant's Exhibit Ortmayer File and Contents" (p. 370), and it is almost conclusive of the truth of his statement.

The second claim, as first drafted in his application, as may be seen by this exhibit, is as follows:

2. "A horse collar sweat pad provided with hooks made of wire *bent* to CLASP *the roll* of the collar, and also having laterally extended ends clasped to the pad, substantially as and for purposes specified."

This is simply a claim for the form shown of the McClain clasping hook in Patent No. 2, when made out of wire. If any doubt *could* exist about this excluding the hinging loop, a reference to claim 1, immediately preceding the above in said exhibit, will quickly dissipate it. The first claim distinctly *calls* for the hinging loop in unmistakable language, hooks made out of wire and *hinged* to the said pad."

At that time Mr. Ortmayer evidently thought that the hook, without the hinging loop, contained a patentable invention.

Having sworn to the application, he would be held to have constructive knowledge of its contents, if necessary, but he admits (A. 89) that he read it before swearing to it.

Both the first and second claims were rejected, on reference to the Scherling patent, McClain No. 3.

Ortmayer struck out both claims, and inserted the claims now found in his patent, among which there is none for the hook *in simpliciter*.

While we do not know what your Honors may think of this, we have no difficulty in understanding why this gentleman, who started this infringing business because he "disliked to buy things outside which he could make just as well himself," speedily became persuaded that the clasping hook of wire contained no patentable invention.

Just think of it one moment, if your Honors please, here is a man handling such pads for almost half a century, all that time familiar with the evils incident to the old modes of attaching them to the collars, running all that time around the ancient groove on which he was started, never having an idea, nor making a suggestion of a remedy for them—a perfect type of his class.

A man of genius and industry comes along who not only provides a perfect remedy, but so introduces it to the trade that it immediately displaces the old modes, and there is a fair prospect of his being rewarded for the good he has done.

This man, of a half century's inanition, resists the innovation, refuses to handle the invention; then, when compelled so to do, purchases them indirectly from his neighbors; still refusing to deal directly with the inventor, lest he should appear to recognize the value of the invention, or give encouragement to the inventor; and finally, when the old modes are substantially displaced, and he is compelled to either handle the invention, or lose his trade, he immediately proceeds to make the invention himself, for the reason that "as a manufacturer of saddlery generally, and among these sweat pads, I disliked to buy things outside which I could make just as well myself."

This man now swears, and oh! how placidly, that it required no invention from a person familiar with safety pins to make these inventions.

If your Honors have read the testimony, or consider-

able of it, you know what a beneficent thing the discovery has been, and what a boon it is to "man's best friend;" and if you have taken but a superficial look at the things shown in the above list of patents, illustrated by the testimony of the chief of these patentees, Ortmayer, you know how desirable it has appeared to the professional inventors to get their dishonest hands upon it; and with these sources of information explored we doubt not your Honors are in a position to weigh, at their proper value, the learned arguments used by our very able and astute opponents, to show that, not this appellant, but the owners of these thirty patents—who are usually, for this purpose, called "The Public"—ought to have the benefit of this discovery. The claims are quoted at p. 21, ante.

Is the claim of McClain Patent No. 1, in issue, capable of being construed to cover the "single" clasping hook as used by both appellant and appellee alike? We respectfully submit that it is so capable.

Is there doubt that this single clasping hook embodies the discovery of appellant? In addition to that, is there doubt that it embraces appellant's invention, the expression of the discovery, as well? Is there any thing in the letter or in the spirit of the law that requires a forfeiture of this discovery at the hands of this appellant, because, forsooth, owing to the exigencies surrounding this invention and its application to practice, he took two patents instead of one? If there be, it is not written in the law. If there be any impediment to holding the single clasping hook to contain the substance of the claim under consideration, it is not found in the English cases cited, nor is it found in the letter or spirit of the constitutional provision, before quoted, giving Congress the power, *and only that power*, to secure to inventors the exclusive right to their discoveries. Nor will any such impediment be found in the reasoning of Mr. Justice Nelson's opinion in *LeRoy* v. *Tatham* before referred to, or in the reasoning of Mr. Justice Bradly or Mr. Justice Blatchford, either in *Tilghman* v. *Procter*, 102 *U. S.* 707; in *Consolidated Valve Co.* v. *Crosby Valve Co.*, 113 *U. S.* 157; or in *Morley Machine Co.* v. *Lancaster.*

The spirit that vivifies these grand opinions had its prototype in the language of Baron Alderson, Webster's Pat. Cases, p. 341. He says: "Lord Eldon lays down the principle so long ago as 1800. He says patents are to be considered as bargains between the inventor and the public, to be judged of on the principles of good faith, by making a fair disclosure of the invention, and to be construed as other bargains. That is, the principle which must be taken to be the sound principle."

And why should not the patents at bar be treated with as much consideration as those involved in any of the above cases? Has not the discovery in issue here been of as great importance as that of the Ransons, Tilghman, Richardson or Morley? Is not the practical benefit conferred by it greater? Aye, much greater than that conferred by either of these magnificent pioneers?

Or, upon the other hand, what does the country or the useful arts owe to this appellee? He has taken advantage of our patent system, the better to enable him to reap where this appellant has sown. That system never was intended to enable dishonest men, actuated by socialistic sentiments, to profit by preventing benefactors of the useful arts from obtaining the reward that the law intended they should have! He has attempted to show how the patent system can be used to thwart its own beneficent ends; how the reward intended to encourage the inventor can be made dead sea fruit to him, that he, Ortmayer, may dishonestly profit thereby. His position, as we submit, does not commend him to the favorable consideration of this court.

It is insisted by defendant's counsel, when discussing the McClain Patent No. 2, that all the invention therein shown, also exists in the patent under discussion. Give appellant the benefit of that argument while considering patent No. 1.

Considering the relative position of the parties before the court, and the merits of their respective contentions, is it not a matter of justice, equity within the law, to ask your Honors to mete out judgment to defendant upon the patent

No. 1, under consideration, in accordance with the spirit of that argument?

If their argument be sound it necessarily follows that the single clasping hook which their argument admits, they have taken from the patent McClain No. 2, contains the discovery, and embodies the invention of McClain Patent No. 1.

This being so, this court, it is with great deference submitted, ought to labor "*Ut res magis valeat quam pereat*," which is the first in importance, and ought to be the controlling rule of construction where, as in this case, the question is who shall get the reward for a valuable contribution to the useful arts, the discover thereof, or an undisguised pirate?

Your Honors, it is submitted, will do no violence to the law by adopting the spirit of Baron Parke's Paean, in delivering the judgment of the Exchequer, in *Neilson* v. *Harford*, when he found that, notwithstanding the almost insuperable objection to Neilson's specification, viz: That he claimed what he did not invent, and did not claim his real discovery, the other judges agreed to sustain the patent. At p. 371-2, Webster's Pat. Cases, he says:

"But, my Lord and my brothers, after considerable hesitation, are of opinion that a construction may reasonably be put upon this clause which will support the patent; and although I myself still entertain great doubt whether such is the true construction, I am not prepared to say that it is not, and I am very glad that in so meritorious an invention as this is admitted to be, in this view of the case, the inventor will not be deprived of his reward."

With reference to the claims of McClain Patent No. 2, they can be treated together.

Ortmayer was selling the pads containing the clasping hook of this patent when he made what he calls his invention. The Ortmayer hook is that of the McClain Patent No. 2—except that the material is steel wire instead of band steel. The circumstances calling forth this invention and necessitating the change from the double clasp-

ing hook to the single one, are touched upon briefly in the testimony of appellant A 4, p. 268 et seq.

The differences between them are described in the specification of the patent No. 2, under consideration, to which reference is hereby made, p. 362 et seq. Shortly stated, these differences arise from the fact that the back-roll of a horse-collar has a different diameter at every cross-section that may be taken upon it from top to bottom. It results that a clasping hook that will fit any one cross-section of a back-roll of a collar will not fit any other cross-section, so that a pad supplied with a double clasping hook can never be raised or lowered inside that collar, and rarely will a pad having any particular sized double clasping hook, and adapted to fit one particular collar, ever fit any other collar. In addition to this an examination of the specification, in connection with the drawing accompanying it, or an effort to place a pad, fitted with the double clasping hook, upon a collar, will show that it is a matter of considerable difficulty. Further, as the deposition of appellant shows, it was not practicable to rivet these double clasping hooks to the pads by any machinery then to be had, nor does it appear that there is any rivet clinching machinery yet to be had that would accomplish that purpose. The problem thus presented was solved by omitting so much of the double hooks as clasped the rear roll of the collar, and it was found that the single roll clasp served every purpose within the purview of the original discovery, and obviated every difficulty encountered in the effort to use the double clasping hook; and, it was further found, that the single clasping hook not only cost considerably less to make when made from the same material as was requisite for the double clasping hook, and less for the labor of attaching them to the pads; but, in addition, an inferior grade of steel would answer as well for the single clasping hook, as less resiliency was required than for the double clasping hook—all these appear from the face of the specification, and from appellant's testimony, but an inspection of the hooks themselves, without other testimony, would be conclusive of every thing stated.

The first observation to be made upon this patent, and upon the objection to it that all of the invention shown in it is embraced in the first patent, is that there is no interfering claim of invention. The invention requisite to pass from the double clasp to the single clasp never occurred to any mortal until after the grant of the single clasp patent. Or, stated in another form, there is nothing in this record to interfere with your Honors saying, in the furtherance of common honesty, and rewarding a most deserving inventor, that it does not lie in the mouth of the appellee to say that the discovery of the clasping hook does not go in aid of this patent.

We see no objection arising out of the principles involved, in saying this as matter of strict law. Nor would we have your Honors infer, because we think it unnecessary to dwell upon this suggestion, that our conviction upon it is less strong; for we sincerely believe that the more carefully it may be examined, in the light shed by the facts of this cause, the stronger and sounder it will appear.

But, as intimated, we submit the ends of justice may be well sustained by the enforcement of a doctrine analogous to, and based upon the principles of, equitable estoppel. This doctrine was enforced, and clearly expressed, by this court in a case that called for it less strongly, we submit, than the case at bar, as follows:

"Therefore, letters patent for an improvement on a patented invention can not be declared void because they include such patented invention. Much less does it lie in the mouth of a party who is infringing both the improvement and the original invention to set up the existence of the first patent as an excuse for infringing the improvement. It is only the patentee of the original invention who has the right to complain of the use made of his invention. We are, therefore, of opinion that the first defense to the suit must fail." (*Cantrill* v. *Wallick*, 117 U. S. Rep. 694.)

And we *could* add, that it has been enforced in cases where the opinions did not formulate it.

The learned judge who decided this case in the Circuit Court based his decision—that the patent under discussion contained no invention when compared with the McClain Patent No. 1—upon the doctrine of an earlier opinion of his own. *Stow* v. *City of Chicago*, 3 *B. & A.* 91. This doctrine is thus stated by the learned Judge:

"A reconstruction of a machine so that a less number of parts will perform all the functions of the greater may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before in the combination, can not be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all or less than it did before."

Walker on Patents cites this as the heading for section 35, under the title of "Invention," but does not refer to any other case in support of it, and we know of no other such case; and hence, insist there is none other. The case of *Stow* v. *City of Chicago* was brought here for review, and the opinion of this court will be found in 104 U. S., p. 547.

An examination of it fails to show any approval of this doctrine—no reference whatever is made to it.

We submit that it is fallacious in this: It takes no account of the effect on the operation of the device or devices, left after and by the removal of the omitted part or parts. Is their operation better or in any way more satisfactory? The quotation suggests no modification in view of such considerations.

We do not quarrel with the application of this doctrine in *Stow* v. *City of Chicago* where, it appeared, all that the patentee had done was to remove the board foundation for the pavement provided for in the prior Nicholson patent; for it may have been that this removal did not change in any way the operation or lasting qualities of the other portions or ingredients of Nicholson's pavement.

But, obviously, upon this inquiry depended the correct application of this doctrine; and, in this connection, if per-

mitted, we would emphasize the significance of this court declining, as it did, to indorse it.

In the case at bar we have the reconstruction of a machine so that a less number of parts does perform every useful function of the greater number; and, not only that, but the reconstructed machine is, almost infinitely, better in operation than the original one—even when we leave out of view the greater economy of its manufacture and application.

In the paragraph of the opinion following this quotation, the learned judge admits that the machine of the smaller number of parts is better than that with the larger number, and, we ask, does he not thereby admit, his intention to the contrary notwithstanding, the total inapplicability of this doctrine to this cause?

We quote: "It is true that when only the forward spring is used it enables the person using the pad to fix its location on the collar more readily than when two springs are used, as, in that case, the two must be so located as to enable both springs to clasp their respective rolls of the collar, and as the rolls of the collar diverge the double spring could fix the pad only at one place on the collar; *but the convenience that may follow the use of this front spring alone does not give to this front spring any new function or feature.*"

In other words, the learned judge admits that benefits have followed from the removal of the rear spring; but, he says, these benefits have not been derived from any addition to the features or functions of the front spring, *i. e.*, changes of its form; for does he not admit improvement of operation or function?

Is not this unnecessarily narrow?

If the use of the single clasping-hook gives great and additional advantages over that of the double clasping-hook, is not that sufficient? Are these advantages less useful, or less profitable, to the art than if they arose from an addition to, or change of shape of, the front clasping-hook?

Change of form is not the consideration for the "Bar-

gain," stated by Lord Elden and quoted by Baron Alderson, ante p. 34, whereby the patent system offers a reward. Benefit to science, or useful arts, is the only consideration that the law recognizes.

While we say it with all due respect and deference, we insist that the vice, if we may be permitted to so call it, of this reasoning of the learned judge, is the same as that which enables the patent office to criticise, cut and haggle about an application for a patent for an important discovery; and, at the same time, to grant as many patents for "inventions," *i. e.*, improvements upon such discovery, as applicants may show changes of form or appearance, in an established class.

It was while struggling with this misconception, or misapplication, of the purpose and spirit of the patent system that Justice Nelson exclaimed, in his before-referred to opinion, 14 How., p. 188:

"Even Franklin, if he had turned the lightning to account in order to protect himself from piracies, must have patented the kite, and the thread, and the key, as his great conception, which gave him a name throughout Europe, as well as at home, for bringing down this element from the heavens, and subjecting it to the service of man."

Suppose any of the thirty patents, before referred to, had been before the learned judge could he have adopted any stricter, or more repressive method of reasoning in treating of it, than he did adopt in the treatment of the patents before the court?

And is it conceivable that an inventior, who has given this art so valuable a discovery, is not entitled to different treatment, and to the benefit of a different spirit in construing his patents from that of one, who, while contributing nothing to the art, takes a patent the better to enable him to pilfer from one of the class that the patent law was made to reward?

We have not so read the opinions of this court. In passing from this subject permit us to ask:

Is not such judicial reasoning an encouragement to the infringer?

Does it not, indeed, offer an inducement to infringe, and, in similar ratio, *discourage inventors and thereby impede* the "Progress of Useful Arts?"

Is such judicial reasoning consonant with the spirit of a statute that offers a reward to the inventor for his *Discovery?*

Finally, if National Bad Faith may be ever predicated of the action of courts, how much more pronounced must such action be than is the spirit of the ratiocination of which we are treating?

Want of Novelty.

As before stated, a large part of the record is occupied with patents that are alleged to contain the inventions of both appellant's patents, and several witnesses have been examined about prior uses that are also alleged to anticipate the patents in issue.

With reference to the prior uses they are limited to safety pins, and these safety pins are shown just as well by the patents, or some of them, alleged to anticipate appellant's inventions; so that upon these prior uses we have no further remarks to offer here.

As regards this defense, we observe, first, that the learned judge of the Circuit Court did not see any thing in any of them of sufficient relevancy to induce him to take any note of them.

Second, the deposition of James W. See, pp. 260–7, explains, and fairly explains, each of these devices, and this testimony we adopt as our remarks upon them.

But, third, we desire to make one more remark, in this connection, and that is to call attention to the fertility of resource of defendant's expert witness—Wm. S. Bates. His treatment of these patents we will attempt to illustrate by reference to his testimony upon one of them, viz: the "Deming Patent."

He says, p. 346: "The Deming Patent of 1877 shows and describes a horse-collar pad formed of leather and attached to the collar by two *hooks*, one of which embraces the fore roll and the other the back roll of the collar. The hooks are formed of the edges of the leather pad, which

are bent over for this purpose. The pad is retained in place by the elasticity and stiffness of these edges. As seen in section in figure 2 of the drawing, the fastening arrangement of the Deming patent is exactly like that of the McClain No. 1. Patent. There are two hooks, one for each roll of the collar, and these hooks are springs, though not steel springs as in the McClain." And upon p. 350, at the bottom of the page: "Also that pads had been attached to collars by means of two elastic hooks acting like the hooks of McClain's No. 1 Patent, as shown by the Deming patent."

Upon this Deming patent Mr. See testified as follows, p. 264: "The Deming patent presents a horse-collar provided with a slip lining. This lining is not a soft pad. The patent calls it an 'attachment,' the intention being that the collar and attachment may shift independently of each other. The slip lining or attachment is formed of leather crimped to fit the collar and no means of attachment other than its crimps are provided. It presents no comparable analogies to the McClain patent."

Thus, in the experting of Mr. Bates, these crimps, the edges of a necessarily thick piece of leather, become "hooks." A glance at the drawing, p. 408, will illustrate this. But an examination of this exhibit, it is submitted, will not be altogether profitless upon another branch of this cause: The inventor—Deming—evidently had experience of the soft pads. He had learned that the slip of the collar, or independent movement of the soft pad, upon the horse's neck was fraught with danger to the horse, and inconvenience to the driver. He had become persuaded that it was not practicable to have a soft pad so secured to the collar that it would be absolutely immovable when in use, and, at the same time, capable of instantaneous attachment, and detachment, for drying. He had concluded that the difficulties involved in the problem were so great as to exclude the soft pad entirely from consideration; and had turned his attention to obtaining a surface—hard or soft—that would remain stationary, and thereby avoid chafing, however much the collar might

move—movement of the collar being of course unavoidable. Hence Deming's specification says, p. 408: "It consists, substantially, of a piece of leather or other suitable material, that is interposed between the collar and the animal's neck, and is shaped so as to be suspended from the collar, but in such manner as to be independent of the movement of the latter, and to remain stationary upon the neck."

It must be self-evident that his remedy was absurd, for if the "attachment" was tightly secured to the collar, *as the drawing shows*, it would have the same movement as the collar, and having a stiffer and harder surface would chafe the skin still more than the collar would do without the "attachment;" and if the "attachment" were loosely suspended to the collar, *as it is described to be in the specification*, it would have not only the chafing movement of the action of the collar, but it would have the additional movement resulting from its loose suspension.

But the exhibit usefully suggests to what straits must harness makers have been driven for a remedy for the imperfections of pad fastenings when they had recourse to such stupid make-shifts as this?

We will close our comments upon this subject by quoting from the deposition of defendant's expert, Bates, the admission, most reluctantly made, that appellant's discovery and invention are both entirely novel, p. 355.

Q. 25. "If any exhibit, patent or otherwise, has been placed before you in this case, excluding, of course, complainant's patents and Ortmayer patent, which shows, describes or suggests in it three separate articles, viz: horse-collar, a pad to go under the horse-collar, and a metallic hook to be attached to the pad in any way and shaped to grasp over one or both rolls of the collar detachably, thus securing the separate pad and collar together, regardless of whether such coupling device be rigid or elastic, please point to any and all such exhibits, if any there be?"

A. "The McClain Canadian Patent is such a one; the Cochrane English is such a one, except that the collar is a saddle; a number of the other patents show and de-

scribe three separate articles, one of which is a hook to connect the other two."

Q. 26. "The McClain Canadian patent, being one of the complainant's patents, and subsequent in date to McClain's Patents Nos. 1 and 2, upon which the bill in this cause is in part based, it is excluded from the category, and was so intended by the form of the last question, so that I understand you that there is none of the patents introduced to show the state of the art that shows those three articles as defined in the last question, the Cochrane English patent showing a saddle and saddle girth only. Am I right about this?"

A. "The Cochrane patent shows the pad and girth with a hook on the pad to engage the saddle. The saddle is not shown in the drawing, but is described in the specification. The McClain Canadian patent is prior in date to the Scherling patent. It has collar pad and hook. With these exceptions you are right."

The Scherling patent being out of the case, and the McClain Canadian patent with it, and the hook of the Cochrane English patent being simply a bent bar attached to the girth, which forms an impediment to the forward movement of the saddle, or placed in the rear of the saddle, is an impediment to its rearward movement, and so far as its function is concerned, which is merely that of an abutment, might be a straight piece projecting out from the girth in front or rear of the saddle, and not intended to clasp, or grasp, the saddle, or any thing else, and not capable of doing so, it is obvious that this is an admission of the absolute novelty of the clasping hook of appellant.

Infringement.

It is said defendant does not infringe, because his hooks are not springs. The opinion of the Circuit Court states: "Although there is undoubtedly some elasticity in the wire from which defendant's hook is made, yet it is manifest that the hook is intended to operate by forcing the collar roll into the throat of the hook instead of opening a light flexible spring and snapping it around the collar roll,

as would be done in applying the spring shown in either of the McClain patents."

Again, "Now, as the defendants use only one hook, and that not dependant on its elasticity for its effective work as well as defendants' wire hook, it is clear to me that they do not infringe the first claim of the patent." McClain Patent No. 1, p. 361, says: "The top ends of the pad sides or bodies are adjacent the withers of the neck, and are provided with elastic springs—steel—which are so made as to be capable of being opened and then clasped around the body of the sides of the collar."

And McClain No. 2, p. 363, says: "And it should be here noticed that the use of a curved elastic spring, as a means of adjustably attaching a pad to a horse-collar, is not so much that said spring can be adjusted to fit different sized collars, as that such a spring enables the pad to be attached to, or disengaged from, a collar with ease, and in the quickest manner possible."

Referring to the language of the learned judge it might well be said that, in addition to its admission that defendants' hook has all the spring required by the language of the McClain patents, *i. e.*, "undoubtedly has some elasticity," it describes, with fair accuracy, the function, in this regard, of the McClain spring as being part of the defendant's hook. What is the difference between "forcing the collar roll into the throat of the hook" and capable of being opened and then clasped around the body? ."

Does the learned judge mean to distinguish between opening the clasping hook by "forcing the collar roll into" it, and opening it by the fingers? If so, his distinction is not based upon any thing in the patent.

Peacock, the man who has made all of defendant's hooks, testifies that they are made of Bessemer steel wire; "the hardest cheap steel wire in the market"; that this material "has more elasticity, regardless of the form in which it is put, than any other Bessemer steel on the market"; that it has "greater strength . . . to keep its shape . . from the fact of its being hard drawn wire,"

and "the harder drawn the steel wire may be, the more elasticity or spring power it has." A. 43 to 49, pp. 312–3.

Ortmayer, defendant, says: "My hook is made stiff enough to keep its shape, and open far enough to receive or go over the roll of the collar, without opening further. . . " A. 42, p. 322. Five witnesses, who were engaged in selling defendant's pads—all of the witnesses examined in the cause who had had this experience—testified that the Ortmayer clasping-hooks had sufficient spring or elasticity for the purpose, and some of them testified that they had no difficulty in selling the defendant's pads to their customers as, and for the complainant's manufacture, known in the market as the "Success," viz: John Blackadore, p. 254; George D. Elliott, p. 255. This witness, in addition, says that if defendant's hooks had no spring they could not be used. A. 7—therein he differs from the opinion of the learned judge of the Circuit Court who stated his opinion, p. 21: "As I think a stiff hook of cast or malleable iron would work as well as defendant's wire hook. . . "

Bernard Thiemann, p. 256. This witness agrees with witness Elliott, A. 7 and 8.

Louis Schlierbach, p. 258, and Jacob Otto, p. 259.

But we should apologise for using so much space upon this discussion for two reasons: First, defendant has not so denied infringement as to make it an issue or justify its discussion. *Vide* opening sentence, 2nd par., p. 9, and amended answer, p. 14, copies this language; and second, so far as its discussion has been introduced, its purpose has been, not so much to show a difference between complainant's and defendant's clasping hook, as to belittle, and obscure, if possible, complainant's discovery and invention by the attempt to fix, and protract your Honor's attention upon form and material—the incidents of the invention—which latter is only the expression of the discovery.

Respectfully submitted,

JAMES MOORE,

of Counsel for Appellant.

FILED,
APR 23 1891
JAMES H. McKENNEY,
CLERK

Supreme Court of the United States.

OCTOBER TERM, 1890.

NO. 348.

EDWARD L. McCLAIN,
Appellant,

vs.

ANDREW ORTMAYER AND CARL G. ORTMAYER,
Appellees.

Appeal from Circuit Court of the United States for the Northern District of Illinois.

BRIEF AND ARGUMENT FOR APPELLEES.

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BRIEF AND ARGUMENT FOR APPELLEES.

The bill in this case is founded on letters patent No. 259,700, of June 20, 1882, and No. 267,011, of November 7, 1882, both issued to E. L. McClain, and No. 298,626, of May 13, 1884, issued to John Scherling, all for Improvements in Pads for Horse Collars.

The defendants claim that they do not infringe any of the patents sued on, and that none of them are valid.

Sweat-pads are, and for many years prior to the date of complainant's patents were, used to protect the horse from galling or becoming sore under the collar, harness or saddle. They are simply cushions, usually made of strong canvas or ticking and stuffed with hair, interposed between the portion of the collar or harness that bears against and tends to chafe the skin. Sweat-pads are old, and the length,

size and shape of the pads, and whether they are used under the collar or under some other portion of the harness, are immaterial, so far as the patents in suit are concerned. This will appear from the statements of the patents themselves.

McClain, in his first patent, No. 259,700, says:

> "The sweat-pad as just described is not claimed as a *new* invention."

And in his second patent, No. 267,011, he says:

> "My invention relates to a device for attaching pads to horse-collars and *other parts* of harness where adjustable temporary pads are used. . . . It is to be understood that my springs are to be metallic or of any suitable elastic substance, and that the pads to which they are to be attached *may be of any kind, material or construction whatever.*"

This fact is also fully established in the documentary evidence and in the depositions on both sides.

We have thus to start with the idea that, whether the sweat-pad is new or old, whether it is of one size and shape or another, whether it is used with a collar or some *other* portion of the harness, are all matters of no importance in this suit. Infringement and anticipation are unaffected by these extraneous considerations. In a word, the controversy must be ranged around ideas wholly unassociated with the novelty, the shape, the size or the place of use of the pad as a pad. The only novelty in the alleged inventions, if there be any, relates solely and simply to the means for attaching the sweat-pads to the collar or other portion of the harness. The *means* for effecting the attachment are alone claimed to be new.

Thus, in the first patent sued on, McClain says:

> "The object of my invention is to produce a sweat-pad for a horse-collar which can be easily and readily attached to or taken from the collar."

And in his second patent sued on he says:

> "The object of my invention is to furnish more perfect means of adjustably attaching pads to horse collars than those yet devised, . . . and it is also my object to make such means applicable to other harness pads."

And in the third patent sued on the patentee says:

> "My invention relates to horse-collars; and it consists in the special construction of a combined wire safety pin and hook for fastening the pads to the collars."

Starting thus with the understanding that the patents sued on are confined merely to the *means* for attaching the pads to the collars or other parts of the harness, we will proceed to consider the means described and claimed in each patent in its order, together with the defenses relied on in reference to the same.

I.

The first McClain patent sued on is limited by its language and the acts of the patentee to a double roll elastic spring.

The first claim, which is the only one alleged to be infringed, is as follows:

> "As attachments to a sweat or other horse collar-pad, the elastic springs S S, substantially as described and for the purpose set forth."

The springs S S present two distinct clasping portions or springs, each performing a different function from the other in the operation described and shown. One of the springs encircles and clasps the fore roll, and the other the rear or body side of the collar. They are in every part of the specification described as *double* springs, and in the plural number. In his specification the patentee says:

> "The top ends of the pad sides or bodies are adja-

cent the withers of the neck, and are provided with elastic springs—steel—which are so made as to be capable of being opened and then clasped around the body of the sides of the collar.

"Thus one end of the spring is so curved as to partly encircle the fore wale or small roll of the collar and to hug it so closely as to keep out of the way of the hame, and the other end is so curved as to similarly partly encircle and hug the after wale or body side of the collar and yet not interfere with the hame."

This description, in connection with the drawings and the plural language of the claim, makes it clear to demonstration that the springs S S are intended by the patentee to be understood as *double* springs extending out *toward each side* of the pad, and clasping the horse-collar around *both* the front and rear sides. A single spring could not, under any possibility, be "capable" of clasping "both sides of the collar" nor could it be "so curved as to partly encircle the fore wale or small roll of the collar," and also so curved as to "similarity partly encircle and hug the after wale or body side of the collar." Such language with reference to a single spring would be incapable of meaning. When, therefore, the claim calls for the "springs S S, substantially as described and for the purpose set forth," and no other construction, arrangement and operation of springs are anywhere hinted at, much less shown or described, the conclusion is irresistible that the claim is limited to springs that at the same time clasp *both the fore and the after wale of the collar.*

With equal certainty, though by a more circuitous route, we come to the same conclusion that the claim is limited to a *double* spring—when we consider the patentee's own acts in applying for and obtaining a patent on a single roll spring adapted to and capable of encircling but one roll of the collar. If he regarded the spring of his first patent as a single

spring, as well as a double spring, why should he apply for and obtain a patent on a single spring?

In the second patent sued on, No. 267,011, applied for August 11, 1882—less than two months after the date of the patent for the double spring—McClain describes his single roll spring as an improvement on his double roll spring, and says:

> "Said spring S differs materially from the spring on my previous patent. First, this spring has but one curved portion, intended for the fore roll only of the collar, instead of a curved portion for the fore roll and one for the back roll."

The specification, in fact, makes repeated reference to the supposed differences between the single and the double roll springs, but the above extract, which serves as a sample, will show that McClain, the patentee, insisted upon this distinction between the two.

And in his application for the single roll spring, as appears from the file of the single spring patent in evidence, McClain, in a letter to the Office, dated September 2, 1882, argued at great length, in order to get his patent, that the single roll spring was a very different device from the double roll spring. In concluding his argument, at the bottom of page 461 of the Record he says:

> "The single roll spring must be conceded to be a structure positively and unequivocally *different* from the double roll spring."

It thus appears that the complainant, the patentee of both the single and the double roll springs, is limited in the first patent to a double roll spring by the language of the specification and claims themselves, and by the argument he made in the Patent Office, in his efforts to get his single roll patent, by which he induced favorable action, and which amounts to a construction prior to *lis mota* that must be accepted as an estoppel to his asking for a broader construction for the claim of his patent. On his own construction,

therefore, his first patent is limited to a *double* roll spring, and cannot extend to or cover a single roll spring. As to this matter, Judge Blodgett, Record 21, said:

> "The complainant must, I think, be held to have admitted that his first patent required two springs by his subsequent application for a patent on his single hook attachment."

If this construction of the first patent sued on, No. 259,700, so required by his own language and the construction of the patentee in his second application to the Office, be accepted as correct and controlling, then the defendants do not infringe, because they have never used a two-roll spring. And, even if we do not attack the validity of this patent, we submit that the decision of the court below must be affirmed on the ground that the defendants do not infringe.

In considering this patent, and the construction that should be put on it in the court below, Judge Blodgett, in his opinion (Record, 21), says:

> "As to the first of these patents, I think there can be no doubt that the first claim, and, for that matter, both claims, require the use of the double spring S S—one arranged to grasp the front, and the other the back roll of the collar. The claim is for the attachment of these springs S S to a horse collar-pad. The patentee says in his specification 'One end of the spring is so curved as to partly encircle the fore wale or small roll of the collar, and to hug it so closely as to keep out of the way of the hame, and the other end is so curved as to similarly partly encircle and hug the after wale or body of the collar and yet not interfere with the hame.' Here he describes two hooks or elastic springs for the purpose of attaching the pad to the horse-collar, and claims this device as his invention. A study of the specifications of this patent also shows, I think, very clearly that the patentee intended to use hooks which should depend mainly for their operation on their elasticity. Now, as the defendants use only one hook, and that not dependent on its elasticity for its effective operation, as I think a stiff hook of cast or malleable iron would work, as

well as defendants' wire hook, it is clear to me that they do not infringe the first claim of this patent."

We have thus far considered the case the same as if the first McClain patent were valid, and as if the only question in the case were the question of infringement. We do not wish, however, to admit the validity of the double roll spring patent. We believe it is void.

Its first claim—the one in controversy—is a claim for a double spring *by itself*, instead of in combination with a sweat-pad. This will be apparent on a moment's consideration of the language used:

> "As attachments to a sweat or other horse collar-pad, the elastic springs S S, substantially as described and for the purposes set forth."

This is a claim for the elastic springs S S as *attachments* to a sweat or other horse collar-pad. The words "as attachments to a sweat or other horse collar-pad" are merely indicative *of the use or purpose* to which the springs are to be applied. He desires to use them as *attachments* for something, and to be applied for some particular use. But it has been repeatedly held that the use to which an invention may be put is insufficient to impart patentability to it. It must exist as a novel construction and not be simply novel in the use to which it is applied.

In *Roberts* v. *Ryer*, 91 U. S., 157, this court said:

> "It is no new invention to use an old machine for a new purpose. The inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not."

In *Penn. Railroad* v. *Locomotive Truck Co.*, 110 U. S., 494, this court said:

> "It is settled by many decisions of this court, which it is unnecessary to quote from or refer to in detail, that the application of an old process or machine to a similar or analogous subject, with no change in the

manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result has not before been contemplated."

In view of the doctrine of these cases, and the many that could be cited in harmony with them, it is too well established to be questioned that the words defining the use to which a machine is applied are insufficient to confer novelty or patentability on an old machine. The statement in the patent under consideration that the springs are to be used as *attachments* to a sweat or other horse collar-pad are mere surplusage, and in no way alter the legal meaning of the claim. The claim must stand simply and solely as a claim for the elastic springs S S, without reference to whether they be used for attachments on this thing or that thing, or whether they are applied to this use or that use. If the elastic springs used by McClain in his first patent are old, the use to which he applied them could not make them new.

Such springs are old. The Weeden 1869 patent (Record 388), shows an elastic double roll spring—one with an elastic member extending forward and an elastic member extending backward—detachably attaching a pad or cushion to the object in connection with which it is used—the back of a pew—and with one member of the spring encircling the fore roll of the enlarged and rounded pew top, and the other encircling the rear roll of the same. In both the McClain first claim and the Weeden 1869 patent we find an elastic spring fastened at its middle part to a pad, and extending a curved portion forward and a curved portion backward to severally clasp and partially encircle the two rounded portions of an article in the front and rear, and detachably connect the two together. The purpose, the function, the operation, the shape of the Weeden and the McClain springs are, to all substantial intents and purposes, the same. The defendants would infringe the terms of the

McClain patent if they took the Weeden spring without modification and used it on a sweat-pad. All, therefore, in legal effect, that McClain did, was to take the old Weeden spring off of a cushion, where it was used to detachably connect the cushion to something, and put it on another cushion, which he calls a sweat-pad, to detachably connect the latter cushion to something which he calls a horse-collar. This was not an act of invention.

In the court below, Judge Blodgett virtually accepted our contention that the first claim of the first McClain patent should be considered as simply and solely for the springs, without reference to the articles to which they were attached or the purpose to which they were applied, but he based his reason for dismissing the bill on the ground of non-infringement rather than on the invalidity of the patent. In reference to this matter Judge Blodgett (Record, 21) said:

> "It was urged on behalf of defendants upon the argument that this first claim is baldly for the elastic springs S S, and that the words 'as attachments to a sweat or other horse collar pads' are surplusage, on the ground that an inventor is entitled to all the uses to which his invention is applicable (*Roberts* v. *Ryer*, 91 U. S., 157), and that this claim, not being for a combination of the springs S S with the collar-pad, is for the springs alone. This claim may be subject to this construction, but I do not base my opinion upon this feature of it, as it is palpable to my mind that the claim only covers the two springs S S when used together to fasten a pad to a horse-collar, and that the use of one spring is not an infringement."

We have presented both defenses to the court—non-infringement and non-validity of the patent—although we think that either one without the other must require an affirmance of the decision of the court below, so far as the first McClain patent is concerned.

II.

The second McClain patent sued on is void, or if valid is limited to a spring that the defendants do not use.

The claims of this second McClain patent are as follows:

> "As an attachment to a horse collar-pad or other harness-pad, and as a means of adjustably attaching a pad to a horse-collar or other part of harness, the elastic single roll or single curved spring S, constructed, arranged, attached and operating substantially in the manner shown or described and for or with the purposes set forth.
>
> "The combination, with a horse collar-pad, of elastic single roll or single curved spring S, substantially in the manner shown or described and for the purpose set forth."

The whole of the first claim above quoted is surplusage, with the exception of the words: "The elastic single roll or single curved spring S." The first two lines are simply employed to tell what the spring is to be attached to, and the last two lines that it is to be constructed and used substantially as shown. As we have considered in connection with the first patent, the use to which the spring is to be put is incapable of adding novelty to an old device, and the law presumes and intends that a device is to be constructed and used as shown and described, whether the patentee says so or not. The first claim, then, when peeled down to its kernel, is for nothing more than the elastic single roll or single curved spring S, and the second claim is simply for the combination of this spring with a horse collar-pad.

The only element of novelty, if any, in these claims, is the spring hook made to encircle the fore roll of the collar *alone*, instead of *both* rolls, as in the first patent. There is nothing else. The hook shown, described and claimed as "the elastic single roll or single curved spring S" is simply and merely the *fore half* of the double spring of the McClain

patent. It is merely half of the double spring *cut in two.* A mere glance at the two patents will establish this. On this point Judge Blodgett (Record, 21) said:

> "The second patent is for the elastic single spring S, constructed and arranged so as to clasp only the fore roll of the collar. It in no respect differs in construction, mode of operation, and result from the spring shown in the first patent, which was intended to encircle and hug the fore roll of the collar. In other words, the patentee has cut the two springs of his first patent apart, rejected the one intended to clasp the back roll of the collar and taken a new patent upon the single spring or hook which fastened the pad to the fore roll of the collar in the first patent."

The question is, then, presented and must be met in this form: Did the cutting of the double spring in two and applying the fore half of it to the fore roll of the collar, just as it had been applied before, involve invention? Or, differently stated, did the cutting off and throwing away of the rear half of the double spring, the rest remaining and operating as before, require invention? We think it clear that it did not.

The principle that affords a solution to the question may be thus formulated. *It is not invention to omit a part of a device and omit its function with it.* Anybody can omit or dispense with a part of a machine where he is willing to omit or dispense with the function which such part performs, and it requires no invention to do so. This principle was well enunciated in *Stow* v. *City of Chicago*, 3 Banning & A., 91, where Judge Blodgett said:

> "Can a party make an invention, by omitting from a combination an element which performed a distinct office therein, and leave the remaining ones to perform the same offices or functions, without the omitted element, as they did with it? . . . Suppose a man to have invented a harness with a breaching, can it be invention for another man to take the breaching off and leave the remaining parts to perform the identical func-

> tions that they performed before? A reconstruction of the machine, so that a less number of parts will perform *all* the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission in function, so that the retained parts do just what they did before in the combination, cannot be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all or less than it did before."

This is enough. McClain did not alter his double spring "so that a less number of parts would perform *all* the functions of the greater." All he did was to take a spring which had elastic members extending severally both backward and forward, to encircle both the front and rear roll of the collar, and cut it in two, so as to retain only the front half and encircle only the front roll of the collar, just as it had done before, leaving the rear roll unencircled and unprovided for. If he had contrived to have omitted one spring, and yet performed the functions of both by making the one retained encircle *both* the front and the rear roll of the collar, as both had done before, he might claim to have invented by simplifying. But, instead of this, he simply uses the fore spring to encircle the fore roll of the collar, precisely as it had done before, and in omitting the rear spring he omits its function with it.

In discussing this phase of the case, Judge Blodgett (Record, 22) said:

> "In his first patent McClain provided fastenings to the front and rear rolls of the collar. He found by use that the front spring alone was a sufficient fastening for practical purposes, and there was, therefore, no invention in omitting the rear spring from his device and using the front spring alone to perform the same functions it did in the first patent. It is true that when only the forward spring is used it enables the person using the pad to fix its location on the collar more readily than when two springs are used, as in that case the two must be so located as to enable both springs to clasp their respective rolls of the collar, and as the

rolls of the collar diverge the double spring could fix the pad only on one place on the collar; but the convenience that may follow the use of this front spring alone does not give this front spring any new function or features. In other words, it was nothing but a convenient mechanical adaptation of his first patent to the uses for which it was designed, to cut off one of these springs when experience had shown the back one was not necessary. The single spring shown in the second patent does not do all that was done by the two springs in the first patent, but it does enough for practical purposes. Mr. McClain having, by his claim and specifications, clearly limited himself by his first patent to the two springs used together as shown, I do not think there was any patentable novelty in dispensing with one of these springs, and hence conclude that the second McClain patent is void for want of novelty."

It may, however, be claimed that the invention of the single spring was prior to, or contemporaneous with that of the double spring, and that, therefore, McClain does not stand in the position of a man who takes an existing structure and omits a portion of it. Without arguing this point of law, we will say that the facts do not raise it. The single spring was conceived of *after* the double spring.

In the opening paragraph of his second patent McClain says that "the means now to be described are *improvements* upon those described and claimed" in his first patent, which he refers to by the date of its allowance—May 19, 1882—instead of the date of its issue.

Of course a thing can only be an *improvement* upon something already in existence, but we need not resort to any subtle methods of reasoning to establish that the single roll spring was never thought of until after the double roll spring was patented.

In the file of the second McClain patent it appears that the application was refused, as originally filed, and that in informing the Office why the single roll spring was not included in the first application, in a letter dated September

2, 1882, the following explanation (Record, 459) was offered:

> "The facts are that the applicant, in endeavoring to practice the invention in his existing patent, found that the two-roll spring was not generally applicable to collars of different sizes, as it had been supposed it would be; for it was found that the rolls in collars of different sizes and of different makes varied so much that while it would make a pad applicable to collars of different sizes for light work, the same pad could not be used on collars for heavy work, and hence the invention proved to be imperfect. *This resulted in the invention of the single roll spring of the present application.*"

And in his printed argument in the court below, counsel for McClain admitted that the single roll spring was invented after the double roll spring, saying in his printed brief, "As an invention, it is subsequent in time."

It may, therefore, be considered that the chronology of the inception of the double and the single roll springs corresponded to the order in which the patents for them were applied for and issued, and that the validity of the latter may be questioned on the ground that it does not exhibit invention over the former.

We have thus far confined ourselves to considerations arising from a comparison of the second McClain patent with the first, but our conclusion that the single roll spring patent is unsustainable is equally well grounded on a consideration of the construction he has put on it and the state of the art as disclosed by the evidence.

The claims call for an elastic single roll or single curved spring S. It is shown as a piece of *flat* steel bent into the proper shape and *riveted* to the pad, but as the complainant is endeavoring to enjoin the defendants' *wire* hook *pivotally* attached to the pad, it is evident that whether the spring is flat steel or wire, or whether it is riveted or otherwise attached to the pad, is immaterial, in complainant's opinion.

According to the complainant's own construction, in seeking to hold the pivotally attached wire hooks used by the defendant, his invention is not limited to a flat, elastic, rigidly attached steel spring. He considers that a single curved hook, whether of elastic material or not, falls within the terms of his patent.

But, whether considered as a spring hook or as a stiff hook, we are satisfied that the patent cannot be sustained, and in determining this question we must not forget that the real thing of the McClain claims is the single curved spring or hook, and that describing it "as an attachment" to this thing or that thing, and defining the use to which it is put, do not impart novelty or patentability to it. The simple question for consideration is this: Did single curved springs or hooks—whether of sheet-metal or wire, which defendants use, and which complainant says falls within his claim—exist before McClain supposed he had invented them? If they did, his patent is void, because no invention would be required to combine them with an old sweat-pad, particularly as the idea of providing sweat-pads with hooks had already been disclosed to the world in the first McClain patent.

When subjected to this consideration, we find that a number of prior patents show springs and hooks substantially like those shown and described in McClain's second patent.

The Phelps 1865 patent (Record 384) shows a cushioned head-rest provided with a metal hook, by which it may be sprung over the upper edge of a car seat to hold the cushioned head-rest in place. It shows the idea of providing a cushion with a single roll spring which may be sprung over some object to detachably connect the two together.

The Cochrane 1853 English patent (Record, 440) shows a padded cushion to be strapped onto a horse before putting the saddle in place, provided with two metallic springs that

embrace the front edge of the saddle, and prevent it from moving forward. This patent shows a pad to be worn under the saddle to prevent galling, just as McClain's pad is intended to prevent galling, provided with a flat, single roll hook, fastened to the pad and bent back to encircle the front part of the saddle and prevent its slipping forward or the pad from slipping backward, and thus preserve the relative positions of the pad and saddle. It illustrates the idea of attaching a pad to something used on a horse to prevent galling by means of a single roll metallic spring or hook.

The Ortmayer 1875 patent (Record, 402) shows a pad to be used under a gig-saddle—the part of the gig-harness resting on the horse's back—to prevent its galling the horse, and detachably attached to the gig-saddle by a hook on the saddle. In this patent we have a portion of harness, a pad consisting of a complete or integral article of itself capable of being applied to or removed from the harness, the pad worn under the harness to prevent galling, and, finally, the pad and the harness detachably connected together by means of a hook. It is true that the hook in the Ortmayer patent is on the gig-saddle, instead of on the pad, as in the McClain patent. But surely no one can claim that he has invented anything by transferring the hook from the harness to the pad.

The Stoll 1881 patent (Record, 418) describes a pad for the top of the horse's neck provided with a metal hook that encircles the hame strap from the front and "that will prevent the upper hame strap from working forward, and thus keep the hames in their place on the collar."

But aside from these patents, which describe and show pads detachably secured by metal hooks to portions of the harness or saddle with which they are used, it has been customary for many years, as everybody knows, to detachably attach all kinds of things together by metallic spring hooks.

A number of patents have been introduced which show this to be so.

The Tunny 1878 patent (Record, 411) shows a metallic wire spring attaching a suspender to trowsers.

The Rice 1872 patent (Record, 393) shows a flat elastic hook to be attached to the vest to permit an eye glass or pair of spectacles or other similar article to be hooked upon it.

The Ayres 1875 patent (Record, 404) shows a pad for hernia provided with a hook made of flat sheet metal for detachably attaching a pad to a belt on the wearer.

The Fabrici 1872 patent (Record, 395) shows a pad or cushion for a head rest provided with flat metallic springs to detachably attach it to the back of a car seat.

The Schaub 1879 patent (Record, 415) shows a belt provided with spring wire hooks for detachably holding cartridges.

The Churchill 1869 patent (Record, 386) shows a cushion or pad for a head rest provided with spring hooks to detachably connect it to a car seat.

The Defendants' Exhibits, Holt No. 7, Holt No. 8 and Jenkins No. 11, illustrate forms of lambrequin hooks and picture hanging hooks, such as may be seen in every well furnished house.

The complainant may say that these patents do not show sweat-pads detachably attached to horse-collars. That is true,—but they show, as we intended they should, that detachably connecting two things together by spring hooks was an old and well-known expedient. The curtains of every sleeping car are detachably connected to the rod above by metallic hooks. Nearly every pair of suspenders worn are provided with them. Hitching straps have them. In fact, they are applied universally to detachably connect two things together. Sweat-pads were old. Horse-collars

were old. Detachably connecting them to each other was old. Spring hooks were old. Detachably connecting two things together, by spring hooks, was old. With all these things old and well-known, complainant detachably connects two of these old things—a horse-collar and a sweat-pad—together, with a third old thing—a spring hook. The horse-collar worked just as it did before, the sweat-pad continued to isolate the collar from the horse just as of old, and the spring hook continued to perform its old well-known function of detachably uniting two things together. And this is the complainant's invention!

But aside from the question of its invalidity, the second McClain patent is limited to an "elastic" hook. It must be a "spring" and possess the functions and capabilities of a spring. It must be an elastic spring as distinguished from a stiff spring. In the clause preceding the claims, the patentee (Record, 365) says:

> "It is to be understood my springs are to be of metallic or of any suitable *elastic* substance."

In the body of the specification, speaking of the advantage of using a curved "elastic" spring (Record, 363), he says:

> "And such a spring enables the pad to be attached to or disengaged from a collar with ease, and in the quickest manner possible."

And in the opening clause of his specification (Record, 362) he says that his second patent is for an improvement on his first, "reference to which should be made in order to better understand the means herein described." Turning to the first patent, to which we are so kindly referred, we find the advantages of an *elastic* spring thus stated (Record, 361):

> "Such construction will enable the pad to be easily and readily attached at its top ends to the top ends of

> the collar, and also will permit of attachment at *variable positions on the sides of the collar, so that it can be easily fitted to collars of different sizes.*"

The object of making a spring of elastic material so that it can be sprung open to adjust it in place, as stated by McClain, is to adapt it to collars whose rolls are of *different* sizes. If the roll be small, the spring will embrace it, while if it be large, it will expand enough to be applied in place.

The defendant's hook, on the contrary, consists of a *stiff* wire hook with the ends of the wire bent out from each other at right angles so as to be *hinged* to a piece of leather bent back upon itself and riveted to the pad. The hinged connection enables the hook to grasp the front roll of the collar and encircle it without being elastic, as are the complainant's springs. An examination of the hooks will show that they are made of wire as stiff as it is possible for wire to be, and the method of attachment, grasping and surrounding the fore roll of the collar, does not depend upon *elasticity* at all, but solely upon the *shape* of the hook and the *hinge* to the pads, while complainant's springs depend solely upon their elasticity. They both take hold of the fore roll of the collar and encircle it; the one from its elasticity, and the other from its shape and hinge.

The defendant's hook, or rather the method of attaching it to the pad, was also made the subject of a patent, which is offered in evidence by the complainant, and appears at page 379 of the record. In this patent, Ortmayer, after describing his method of hinging, said (Record, 381):

> "This construction and manner of applying the hook renders it unnecessary to make it of *flexible* material."

Evidence to the effect that the defendant's hooks were not made out of elastic or spring material for the purpose of securing the benefit or effect of elasticity, but that such

elasticity or springiness was unnecessary in, and absent from, defendant's hooks, was taken, and a number of witnesses so testified. We will quote from their depositions on this point.

Peter Seyl (Record, 300) testified:

"I find in the McClain, in the first and second patents, a double and single roll spring. In the A. Ortmayer patent I find a hook bent out of wire, bent in a form that it is impossible to get any spring out of it. I also took one of the hooks, straightened it out, bent it in a very sharp angle in a vice to see if there was any spring in the wire, but found the wire almost as soft as iron wire.

"Q. 8. Please go on and answer that part of my question which has relation to the use of these various devices? A. I find the spring, by fastening on the collar, has to be sprung open and attached that way, and it is fastened with two rivets solid to the sweat-pad. The A. Ortmayer hook works on a hinge, and can be hooked on to the collar without any spring or give to it.

"Q. 9. If the McClain fastening had no elasticity, or springing capability, would it be possible to use it in the way here shown? A. It would be impossible to use it in the way here shown, because you could not hook it over the collar.

"Q. 10. As constructed and used, is there any occasion for any elasticity, or springing capability, in the Ortmayer hook, as shown in Complainant's Exhibit Defendant's Manufacture? A. There is no spring in the Ortmayer hook, as there is in the McClain spring.

"Q. 11. But you do not seem to have gotten the exact point of my question, which is whether any elasticity is *needed* in the Ortmayer hook when constructed and used in the way here shown? A. I stated before that there is not any elasticity needed in the A. Ortmayer hook, and it can be operated without any elasticity.

"Q. 12. In the McClain spring, contained in the Defendant's Exhibit McClain Single-Roll Spring, the free end of the flat steel comes around to about the diametrical center of the partial circle formed thereby

to grasp the front roll of the collar, while the corresponding end of the Ortmayer hook is about or quite the same distance from its opposite side as every other part after the curve—I do not speak from actual measurement in either case. Please state why this difference exists? A. If there was only as little opening on the Ortmayer hook as there is on the McClain spring, it would be impossible to hook it on to the collar.

"Q. 13. I understand you to have already answered what I am now going to ask, but, in order to make the matter perfectly clear, I will ask you to state again whether or not the Ortmayer fastening is in any sense a spring, as that term is understood in mechanics, and whether or not it operates as a spring in the same way that the McClain fastening does? A. The Ortmayer fastening is nothing but a wire hook and can be operated without any spring, while the McClain spring could not be operated without having any elasticity to it.

"Q. 14. Then, as I understand you, the McClain fastening is a spring both in construction and operation, while the Ortmayer fastening is not a spring, either in construction or operation. Is this correct? A. That is correct."

E. P. Peacock (Record, 308) testified:

"Q. 7. Are you familiar with the Ortmayer hook, used as a fastening for horse collar-pads, as shown in the Complainant's Exhibit Defendant's Manufacture in this cause? If so, how long have you known of it and in what way? A. I am familiar with it from the fact I have been manufacturing some for one year or more, for Mr. Ortmayer.

"Q. 8. Have you understood from Mr. Ortmayer how he desired to have them made, and for what they were to be used? A. Yes, I understood they were to be used on horse-collars, and that he wished them made of a material strong enough to stand their shape without bending, so that they should retain the form of the sample he brought over. The sample was the same shape as the hook on Complainant's Exhibit Defendant's Manufacture.

"Q. 9. Did Mr. Ortmayer instruct you personally

to make them in this way; of a material strong enough to stand their shape without bending? A. Yes.

"Q. 10. What do you mean by being strong enough, 'to stand their shape without bending?' A. The material should be strong enough to keep the shape given it, and not give way in any manner when forced over the roll of the collar.

"Q. 11. Did Mr. Ortmayer ever instruct you to make them so that they would have some elasticity or capability of springing? A. They certainly required no spring, or I should have advised him to use different material for the manufacture of the hooks.

"Q. 12. But what did he direct you to make; a spring or a hook? A. A hook.

"Q. 13. As a matter of fact, speaking from your practical knowledge and experience in connection with such devices, is the pad fastening of the Complainant's Exhibit Defendant's Manufacture a spring or a hook, as these terms are ordinarily understood in mechanics? A. Only a hook.

"Q. 14. Look at the flat steel spring, forming the 'Defendant's Exhibit McClain Single-Roll Spring' and state whether or not the Ortmayer hook which you have been referring to is the same, either in construction or operation. A. One acts as a spring when forced on the collar, the other clasps it by a hinged motion.

"Q. 15. Would it be possible to use the Ortmayer hook as a fastening for horse collar-pads, if the extreme part from the ends of the wire—that is to say, the part where the wire passes from one bow to the other—were bent down so as to come as close to the opposite side as the end of the McClain single-roll spring comes? A. It would be impossible if made from the same material as it is at present made of."

Mr. Andrew Ortmayer, the head of the firm of Ortmayer & Son (Record, 322) testified:

"Q. 41. Is your pad-hook here in controversy a spring or intended to operate in any way as a spring? A. It is not.

"Q. 42. What are the practical differences, if any, between the operation of your wire hook and McClain's steel spring? A. Both go over the fore roll of a collar. My hook is made stiff enough to keep its shape

and open far enough to receive or go over the roll of a collar without opening further. The McClain device closes up to a very small space and has to be sprung out or opened to go over the fore roll of a collar, and must necessarily be a spring to close up again."

William S. Bates, a civil engineer and mechanical expert of Chicago (Record, 352) testified:

"The McClain patent No. 2 claims the combination with a horse collar-pad, of elastic single-roll or single-curve spring S. Both claims are the same, so far as concerns the matter here in controversy, and may be treated together. Comparing the defendant's manufacture with this No. 2 McClain patent, I find that the McClain hook is described as being a spring, and is necessarily a spring, as otherwise it could not be got over the roll of the collar. This is apparent from figures 1 and 4 of the drawings, which show clearly that the hook must be opened somewhat to get it over the roll. In the defendant's manufacture, the hook is stiff and inelastic, and is so shaped that it will take in the roll without being opened. This capacity of the defendant's hook, of taking in the roll without spreading, is due partly to its method of attachment to the pad, which permits it to oscillate back and forth, as well as to the shape of the hook. If the McClain hook were so shaped as to admit the roll without spreading, it would not be a success as a fastener, for the reason that it would not sufficiently embrace the roll.

"For the reasons, therefore, that the defendant's hook is not a spring as McClain's is, but is stiff, and that this difference involves serious differences in capacity and mode of operation, I say that it does not contain the inventions defined in the two claims of the McClain patent No. 2."

It thus appears from the testimony of all these parties, as well as from an inspection of the defendant's pads, that the means of fastening them to the collar is simply a hook of *stiff* wire, as *open* at the mouth as the *diameter* of the hook, so that the mouth will admit, without prying it open, of as large a roll as the interior diameter of the hook will accommodate, that it can be adjusted in place without springing

open, from the fact that it is *hinged* instead of *riveted* to the pad, and that it is not adapted to or intended for rolls of materially *different* sizes. It appears, on the other hand, that the McClain hook is made of *elastic* material, that its mouth is much *less* open than the interior of the hook, that it is riveted *fast* to the pad, that it cannot be and is not intended to be adjusted in place without being sprung open, and that it is made elastic among other reasons to enable it to be used on collars with rolls materially *differing* in size. A hook of the stiffness of defendant's hook could not be rigidly attached to the pad and used in the place of the McClain hook. Before it could be used, defendants had to devise a method of hinging it to the pad.

In deciding the case below, Judge Blodgett dwelt on and emphasized the fact that the defendant's hook was a *stiff* hook, while the McClain hook was made of *elastic* material, depending for its effect upon its elasticity. Judge Blodgett (Record, 20, 21) said:

> "The defendants use a strong stiff wire hook fastened to a stiff piece of leather, which is riveted to the pad and adapted to clasp the front roll only of the collar, depending for its ready connection with and grip of the collar rather upon the yielding nature of the collar than the elasticity of the hook. Although there is undoubtedly some elasticity in the wire from which defendant's hook is made, yet it is manifest that the hook is intended to operate by forcing the collar roll into the throat of the hook, instead of opening a light, flexible spring and snapping it around the collar roll, as would be done in applying the spring shown in either of the McClain patents. . . . A study of the specifications of this patent also shows, I think, very clearly that the patentee intended to use hooks which should depend mainly for their operation on their elasticity. Now, as the defendants use only one hook, and that not dependent on its elasticity for its effective operation, as I think a stiff hook of cast or malleable iron would work as well as defendants' wire hook, it is clear to me that they do not infringe the first claim of this patent."

Although the above language was used more particularly with reference to the first McClain patent, it is obvious that it is equally applicable to the second, where an elastic spring is claimed.

III.

The Scherling patent sued on is neither valid nor infringed.

The first claim of this patent—the only one relied on—is as follows:

> "The described safety-pin and hook, formed of wire, consisting of the bows *b b*, and the part *a* connecting the bows, with suitable integral devices for attachment to the collars formed upon the ends of the bows, substantially as described."

This claim calls for the "described safety-pin and hook." and in the opening clause of the specification the patentee says that his invention consists in the "special construction" of a combined safety-pin and hook.

The claim is not for a combination of a safety-pin and a sweat-pad, but for the safety-pin by itself. Like the McClain claims above considered, this claim describes the particular use contemplated for the pin, and says it must have "suitable integral devices for attachment to the collars." The word "collars" should have been "pads," and to give effect to the intent of the claim should be so read. With this correction, the claim calls for a safety-pin consisting of two curved bows united together forming a hook to encircle a rounded object, with suitable integral devices for attachment to the pads, substantially as described.

These "suitable integral devices" are thus described in the specification:

> "One of the bows *b* is continued, to form a pin *e*, which catches into hooks *f* on the end of the other bow *b*."

And we are told that:

> "The pin serves to connect the devices to the pad,

being attached thereto by passing the pin through the pad or the covering of the pad in the ordinary manner, as shown in Figs. 4 and 5."

The whole structure, in a word, is simply a safety-pin with a hook on it large enough to encircle the roll of the collar.

The defendants have produced and offered in evidence a number of prior patents and introduced evidence of a number of prior uses in reference to safety-pins, which we regard as fully anticipating the Scherling first claim. But as the Scherling safety-pin and hook are made entirely from one wire, integral throughout, we will only refer to those patents and uses which refer to integral pins and hooks.

The Jenkins 1880 patent (Record, 417) and Defendant's Exhibit Jenkins No. 3, which was in use more than two years before Scherling's application, show a hook which, enlarged, would encircle the roll of the collar. The two members, or bows, and the hook are united integrally by the wire, just as in the Scherling patent. The end of one of the bows terminates in a hook, and the end of the other bow terminates in a pin, which catches into the hook on the end of the other bow.

The Jenkins pin is exactly described by the following language of the Scherling specification (Record, 366):

> "It is made entirely of steel, or other elastic wire, curved in the form of bows *b b*, connected by a continuous part at *a*. One of the bows *b* is continued to form a pin *e*, which catches into a hook *f* on the end of the other bow *b*. To give proper elasticity to the pin, a loop *d* is formed at its juncture with the end of the bow."

And the language of the first claim would apply equally as well to the Jenkins pin as to the Scherling. Let us read it and see:

> "The described safety pin and hook, formed of wire,

consisting of the bows *b b* and the part *a* connecting the bows, with suitable integral devices for attachment to the collars formed upon the ends of the bows."

Every word of this claim finds a response in the construction shown in the Jenkins patent.

The Judd 1882 patent (Record, 420) forms another complete anticipation of the Scherling claim. In this patent we find a safety pin and hook formed out of the same piece of wire. The safety pin could be attached to a sweat-pad, and the hook, by enlarging it sufficiently, clasped over the roll of a collar.

If it should be objected to the Jenkins patent and Exhibit No. 3 and to the Judd patent that the bows of the hook are close together, while in the Scherling patent they are wide apart, a distinction that amounts to nothing, we would refer to the Moore 1869 patent (Record, 387), which shows a safety pin and hook formed of one piece of wire with the two bows wide apart, as in the Scherling patent, and with one of the bows terminating in a hook and the other making a coil and terminating in a sharpened pin which catches in the hook on the end of the other bow and extends beyond it, precisely as does the point of the pin shown in Figs. 1, 4 and 5 of the Scherling patent.

We have not taken into account, as we consider it of no importance, the obvious fact that the Jenkins, Judd and Moore hooks were in use applied to other purposes than for detachably connecting sweat-pads to horse-collars. The Jenkins hook is described as an eye glass hook, the Moore hook as a pencil holder, and the Judd hook as a curtain hook pin. In the Moore patent the pin is intended to be attached to a coat or vest and the hook clasped around a lead pencil. In the Jenkins patent the pin is intended to be attached to a vest or other garment, so that the hook may be used for an eye glass. In the Judd patent the pin is intended to be attached to a curtain, and the hook clasped

over a rod to sustain the curtain in place. Yet they all furnish illustrations of the construction of a combined safety pin and hook, where the pin is intended to be attached to some material through which it may be passed, and to thus provide it with a hook for the purpose of detachably connecting the material to something. Whether the hooks were used to detachably connect sweat-pads and horse collars, or to detachably connect other objects, is immaterial under the doctrine of *Roberts* v. *Ryer* and other cases cited above. No invention was required or could be involved in taking the Jenkins, Judd or Moore combined safety pin and hook and pinning the pin into a sweat-pad and hooking the hook over the roll of a collar.

In reference to the Scherling patent, Judge Blodgett, in deciding the case below (Record, 22, 23), among other things, said:

> "In regard to the Scherling patent, as already stated, it shows a common and well-known safety pin combined with a hook of the same material and integral with the pin, the material being elastic wire, so that the hook may be secured or fastened to the pad by means of the pin, and the pad then attached to the collar by clasping the hook over the fore roll of the collar. The drawings and specifications show two forms of this device. In Figs. 1, 4 and 5 of the drawings the safety pin is shown, and in Figs. 2 and 3 the hook is attached to the pads by pins inserted in the texture of the pad, with no safety loop or lock to hold the pin in place.
>
> "The proof shows that safety-pins, with hooks integral with the pins, are much older in the art than the Scherling patent. They are shown in the English patent of Montelart, of February, 1864; in the American patent of Moore, of March, 1869; in the American patent of Marston, of January, 1872; in the American patent of Jenkins, of August, 1880; in the American patent of Judd, of March, 1882, while the Canadian patent to McClain, the complainant in this case, of July, 1883, shows a pad fastened to a horse-collar by a wire hook fastened to the pad by inserting therein a pin integral with the hook. . . .

> "I am satisfied that with safety-pins and hooks combined, as shown in the Jenkins and Judd patents, there was no room for invention in substituting a safety-pin and hook, such as are shown in the Scherling patent, for the single hook or spring shown in the McClain patent of 1882."

While we would have no hesitation in resting the invalidity of the Scherling first claim on the Jenkins, Judd and Moore patents, not to mention any others, we feel that we should not omit to call attention to the McClain Canadian patent of July 13, 1883, referred to by Judge Blodgett above. This patent was issued before the Scherling patent was applied for, and no evidence has been offered or attempt made to prove the Scherling invention back of it. It stands, therefore, unaffected as an anticipation of Scherling of everything that it shows and describes, and *on the complainant's own evidence* we can show that it anticipates the Scherling patent and renders it void.

July 2, 1884, McClain applied for a *third* patent, which was issued March 10, 1885, for an Attachment for Sweat Pads. This patent has not been sued on, but defendants have offered it, and the proceedings in the Patent Office in procuring it, in evidence.

The application for this patent, as originally filed, contained claims to cover a hook which was swivelled or arranged "to work on a hinge at the place of attachment," to quote the exact language of the fourth claim as filed. (Record, 489).

The Scherling patent also permits the hook to turn back on the pin the same as though it were "hinged at the place of attachment." It had an axial movement on the pin. And so the Office refused McClain's broad claim and referred him to the Scherling patent.

In replying to this rejection in a letter dated August 18,

1884 (Record, 491–2), McClain, referring to his Canadian patent of July 13, 1883, said:

> "Reference is made in the above Office letter to patent of Scherling, May 13, 1884, which would never have been applied for had the inventor been aware of the above mentioned Canadian patent, or could not have been allowed had the U. S. Office been aware of its existence. . . .
>
> "Now, as to the patent of Scherling, May 13, 1884, No. 298,826, and its relation to my previous patents, and its competency as a reference in anticipating my present improvements, said patent, No. 298,826, was filed March 21, 1884.
>
> "A patent was granted to me in Canada, July 13, 1883, which covered clasps made of wire, and attached in any suitable manner, and the language of which covers everything set forth in Scherling's said patent. The said original Canadian patent is enclosed herewith for examination, after which it is to be returned to its owner. Quotations and references may be made by the Office for future use.
>
> "As soon as Scherling's patent 298,826 was issued, E. L. McClain had Mr. James Moore, of Cincinnati, Ohio, an experienced patent lawyer, examine his U. S. patents No. 259,700, June 20, '82, and No. 267,011, Nov. 7, '82, and the above said Canadian patent, and give an opinion as to infringement before taking steps in court relative thereto. The said opinion is enclosed herewith, and it is also to be returned. It fully sets forth the similarity in construction and functions existing between the said patents.
>
> "From an examination of the said Canadian patent and of Mr. Moore's said opinion, and, according to the law as given in Rules of Practice, March 1, 1884, p. 4., Sec. 24, and p. 5, Sec. 27, which states that 'a patent may be obtained . . . . if the invention has not been patented,' it is evident that the Office erred in granting the said Scherling patent.
>
> "The so-called 'safety-pin' in Scherling's patent is clearly covered by the language in McClain's said Canadian patent, and is nothing more than a means of 'clinching' the device to a pad, and the language of the Canadian patent on p. 9 sufficiently describes such method.

"Further, Fig. 3, Scherling patent, has nothing which could be termed a 'safety-pin.' What he terms a 'hook' and consisting of the bows *b b* and the connecting part *a* is simply the outline of McClain's sheet-metal spring, and is the same as the same parts of the spring shown in Fig. 5 of McClain's Canadian patent. 'Suitable integral devices for attachment to the collars formed upon the ends of the bows' (Scherling's first claim) is certainly covered by the language in McClain's Canadian patent.

"It may be true that there is a slight capability of Scherling's wire device to swivel, but no more than McClain's in his Canadian patent. There is no evidence showing that Scherling endeavored to provide a clasp that would swivel, nor that he was aware of any advantages derivable therefrom. He furnishes no such information to the public, and, consequently, deserves no credit therefor."

Thus McClain, in order to get his *third* patent, argued to the Patent Office that the Scherling patent was fully met by his own Canadian patent, which has been offered by the defendants in this case. He afterwards, as appears by the proceedings in the Office, submitted an affidavit to convince the Office of the invalidity of the Scherling patent, as we understand the correspondence; but, the affidavit never having been filed, no copy is produced. A patent was issued to McClain for certain other features, but it has not been sued on in this case.

This correspondence between McClain and the Office shows, we think, that, in his judgment, and in the judgment of his patent lawyer, Mr. Moore, the Scherling patent was void by reason of the Canadian patent to McClain issued some ten months before. No explanation of this insistance was made by McClain when he testified in this case as a witness. No claim was made that he was mistaken in so insisting when trying to get a patent for himself. No evidence was offered to show that Scherling made his invention before the issuance of the Canadian patent. No fact was dis-

closed to diminish the force of the complainant's own argument against his own patent. Everything remains *in statu quo*, except that the complainant now owns the Scherling patent, and is as much interested in declaring it valid in the court as he was in declaring it invalid in the Patent Office. In each case he insists according to his interests.

In view of the fact that the first claim of the Scherling patent is merely for a safety-pin with a hook on it made from the same piece of wire; that the Jenkins, Judd and Moore patents each shows a safety-pin with a hook on it made of the same piece of wire; and that the complainant has pronounced the Scherling patent void in proceedings prior to this suit, we submit and insist that this bill was properly dismissed so far as the Scherling patent is concerned.

But if the Scherling patent be sustainable on any possible ground, it is for devices that are specific in their construction, and which are not used by the defendants. The claim calls for "the described safety-pin and hook." The defendants use no safety-pin of any kind. The only figures of the drawings of the Scherling patent that show "safety-pins" are Figs. 1, 4 and 5. Scherling says that "the preferred form of the safety-pin and hook is clearly shown in Fig. 1." After describing the pin and hook thus shown, he says "these fastening devices may be modified, as shown at e' and e^2 of Figures 2 and 3." These figures of the drawings dispense with the "safety-pin" feature of the hook, and are therefore not covered by the claim. In other words, the drawings show *several* forms of structure, but the claim calls for a *particular* and *definite* one of them, thus not covering the other forms.

The claim is not only limited to a safety-pin, but the patent in harmony with and in furtherance of that idea says

that this safety-pin has "suitable integral devices for attachments of the collars (pads) formed upon the ends of the bows." The claim here calls for a hook which is adapted to be *pinned into* or *inserted through* the material of the pad *without* any supplementary devices. This is plain from the statement of the specification that:

> "The pin serves to connect the devices to the pad, being attached thereto by passing the pin through the pad or the covering of the pad in the ordinary manner, as shown in Figures 4 and 5."

Even if the claim in calling for a *safety* pin could be extended enough to make it cover the construction shown in Fig. 2, which in general outline resembles defendant's hook, it is still limited to a hook that is adapted to be inserted *directly into* the material of the pad. By this direct attachment, Scherling claims as one of the advantages of his safety pin, that:

> "All the forms shown are readily attachable and detachable, and may be *shifted* from one place to another on the collar. . . . The safety pin may be very cheaply made, and is easily and conviently applicable to the pad and collar, and the same is *adjustable* thereon."

And to get the advantage secured by direct attachment—the shifting from one place to another—all the forms shown in the drawing—those covered by the claims and those not—are provided with *sharpened ends* to pierce the cloth. In no other way can the easy attachment be effected and the advantages be secured.

Turning now to the defendants' pads, we find that their hooks do not have "safety pins" or any kind of pins; that the projecting ends of the wire are not sharpened and are not directly attachable to the pads by *inserting* the wire *through* the cloth of the pad. They are connected to the

pad by pieces of leather slotted and folded, and then riveted to one definite, certain, unchangeable place on the pad.

In view of the fact that the Scherling first claim calls for a "safety pin," which defendants do not have; that it calls for "integral" devices for attaching the hook to the pad, which defendants do not have; that this attachment is effected by sharpening the ends of the wire and inserting them directly into the covering of the pad, which defendants do not do; and that these things are done to secure the advantage of "shiftability" of the hook on the pad, which defendants do not get, we submit and insist that the defendants do not infringe the Scherling patent.

This was the opinion of Judge Blodgett, and in deciding the case below (Record, 23) he said:

> "I am satisfied that the defendants do not infringe the Scherling patent. The claim of that patent in substance is for a hook formed of wire with a safety pin integral with the hook for attaching the hook to the pad. The claim says the pin is for the attachment of the hook to the collar, but this is evidently a mistake, and it was undoubtedly intended that the safety pin should attach the hook to the pad. The defendants do not use a pin integral with their hook for the purpose of fastening their hook to the pad, but the hook is fastened to a piece of leather in such manner as to give it an axial or rolling motion, and this leather is riveted to the pad by rivets passing through the material of the pad. In view of the patents to McClain, this Scherling patent must be confined to the special devices shown and claimed, and cannot be enlarged or expanded by construction, because hooks, both double and single, with which to fasten pads to collars and performing the same function in the same way as is done by Scherling, were shown in the two McClain patents now in suit, and also in McClain's Canadian patent; and hence, as the defendants do not use a safety pin integral with their hook to attach their pads to the collars, they cannot be said to infringe the Scherling patent."

Miscellaneous Matters.

Great stress has been laid by complainant upon the success of his sweat-collars from a commercial point of view. From small beginnings in 1882, his business has grown to great proportions.

He has examined more than fifty witnesses in all parts of the country to show the great demand for his sweat-collars, and the satisfaction that they have given in use. This demand and this satisfaction he attributes to his spring hooks for attaching the pad to the collar. And of course, as the demand for the spring hook pad has increased, the demand for the old method of fastening has fallen off to a great extent. But the evidence shows that McClain has been the only one who has made the manufacture of sweat-pads a specialty; that he has made them of a superior quality; that he has advertised them in the most extensive and attractive manner, as his catalogues show; and that he has adopted means for pushing them on the market, that has largely increased the extent of their sales. He has enlisted the jobbing houses of the country—several hundred of them—in selling his goods; has made the rates uniform, so that competition in price has been avoided; and has thus enjoyed the benefit of their advertising and the efforts of their travelling salesmen. Many of the witnesses for complainant, on cross-examination, have admitted that all these things have contributed to the success of his sweat-pads. We will not prolong our brief by quoting from their depositions, but will simply refer to a few places in the record where the evidence may be found if desired. Record, 47, 57, 71, 79, 83, 85, 88, 92, 105, 113.

Conclusion.

To sum up, we submit and insist that the complainant's first patent is limited to a double spring, is invalid, and is